

circuit breaker 3VA5 UL frame 250 breaking capacity class H 65kA @ 480V 3-pole, line protection TM230, FTAM,  $I_n=110A$  overload protection  $I_r=110A$  fixed short-circuit protection  $I_i=5...10 \times I_n$  UL 489 SB (naval), 50° C without connection



Model	
Product brand name	SENTRON
Product designation	Molded-case circuit breaker
Product designation / according to UL-File	HFAM
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	TM230
Protective function of the overcurrent release	LI
Number of poles	3
General technical data	
Power loss [W] / maximum	22.6 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	7.53 W
Latching - endurance	15 000
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	250 A
Rated continuous current I <sub>u</sub>	110 A
Operating current	
• at 40 °C	110 A
• at 45 °C	110 A
• at 50 °C	110 A
• at 55 °C	105 A
• at 60 °C	102 A
• at 65 °C	99 A
• at 70 °C	96 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	H
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	100 kA
• at 480 V	65 kA
• at 600 V	25 kA

### Adjustable parameters

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

Height [in]	7.3 in
Height	185 mm
Width [in]	4.1 in
Width	105 mm
Depth [in]	3.3 in
Depth	83 mm

### Connections

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

<b>Auxiliary circuit</b>	
Number of CO contacts / for auxiliary contacts	0

<b>Accessories</b>	
Product extension / optional / motor drive	Yes

<b>Environmental conditions</b>	
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>

<b>Certificates</b>	
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>Shipping Ap- proval</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=3VA5211-6EC31-1AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5211-6EC31-1AA0>

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

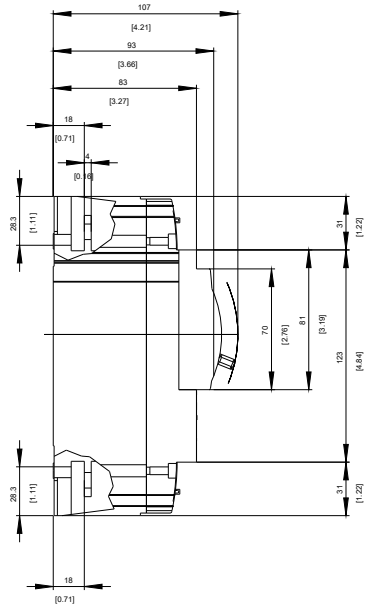
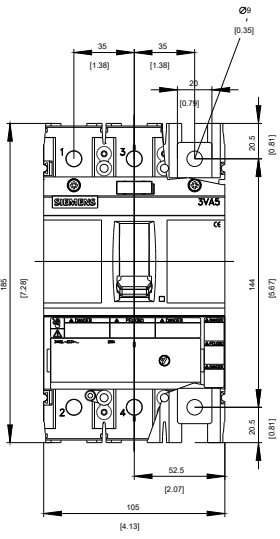
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5211-6EC31-1AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5211-6EC31-1AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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



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