

molded case switch 3VA5 UL frame 125 max. sh-circ breaking capacity 65kA @ 480V 2-pole, line protection MCS110, $I_n=100A$ without overload protection self-protection $I_i=16 \times I_n$ without connection



Model	
Product brand name	SETRON
Product designation	Molded-case circuit breaker
Product designation / according to UL-File	HEAS
Product version	Molded case switch
Design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
Design of the overcurrent release	MCS110
Protective function of the overcurrent release	I
Number of poles	2
General technical data	
Rated insulation voltage U_i	600 V
Max. rated operational voltage U_e with AC 50/60Hz	415 V
Max. rated operational voltage U_e with DC	250 V
Power loss [W] / maximum	12.8 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	6.4 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 _u	100 A
Operating current	
• at 40 °C	100 A
• at 45 °C	100 A
• at 50 °C	100 A
• at 55 °C	100 A
• at 60 °C	100 A
• at 65 °C	97 A
• at 70 °C	94 A

Switching capacity according to IEC 60947

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
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Adjustable parameters

Ground fault protection / tripping switchable / I _{2t} =ON/OFF	No
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Mechanical Design

Height [in]	5.5 in
Height	140 mm
Width [in]	2 in
Width	50.8 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	No
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Environmental conditions

Protection class IP / on the front	IP40
Ambient temperature	
<ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	<ul style="list-style-type: none"> -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

General Product Approval	EMC	Shipping Approval	other
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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=3VA5110-1BB21-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5110-1BB21-0AA0>

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

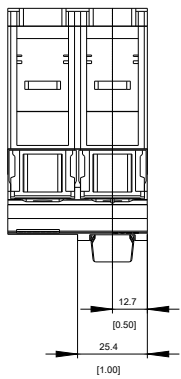
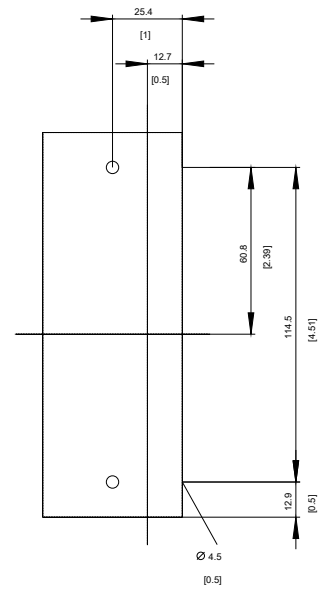
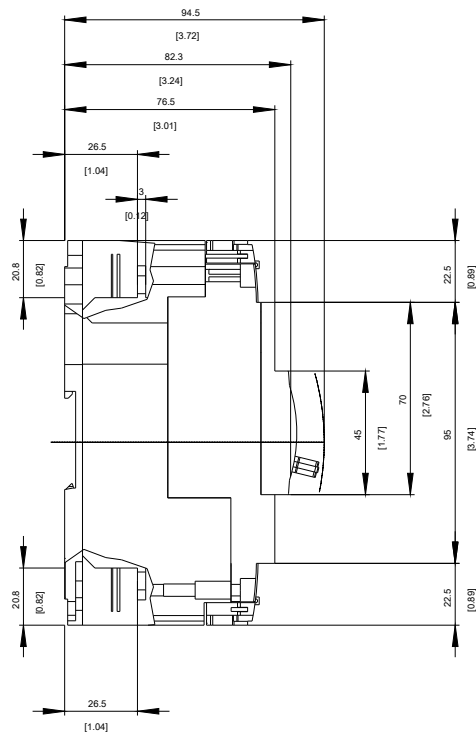
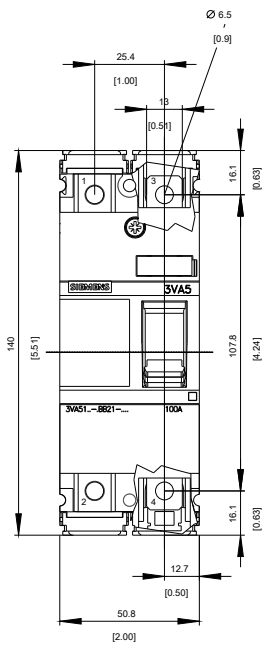
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5110-1BB21-0AA0

CAX-Online-Generator

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

Tender specifications

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



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