



molded case switch 3VA5 UL frame 125 max. sh-circ breaking capacity 65kA @ 480 V 2-pole, line protection MCS110, In=100A without overload protection self-protection li=16 x In nut keeper kit on both sides

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 / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the load switch / according to UL 489 / High-Intensity-Discharge circuit breaker (HID Type)	No
design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)	No
design of the overcurrent release	MCS110
protection function of the overcurrent release	I
number of poles	2
General technical data	
rated insulation voltage Ui	600 V
Max. rated operational voltage Ue with DC	250 V
operating voltage / at AC / rated value	415 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
mechanical service life (switching cycles) / typical	20 000
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	8 000
electrical endurance (switching cycles) / at 600 V	4 000
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	without
product function	
• communication function	No
• other measurement function	No
Net Weight	0.669 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational 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 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
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Adjustable parameters

Ground fault protection / tripping switchable / I2t=ON/OFF	No
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Mechanical Design

height [in]	5.51 in
Height	140 mm
width [in]	2 in
Width	50.8 mm
depth [in]	3.01 in
depth	76.5 mm

Connections

arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	nut keeper kit on both ends
Type of connectable conductor cross-section, connection screw, width x thickness , min.	12 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	17 x 6.5 mm

Auxiliary circuit

product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
number of CO contacts / for auxiliary contacts	0

Accessories

product extension / optional / motor drive	No
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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 / according to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes

General Product Approval

EMC

Marine / Shipping

other

[Confirmation](#)



[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=3VA5110-1BB22-0AA0>

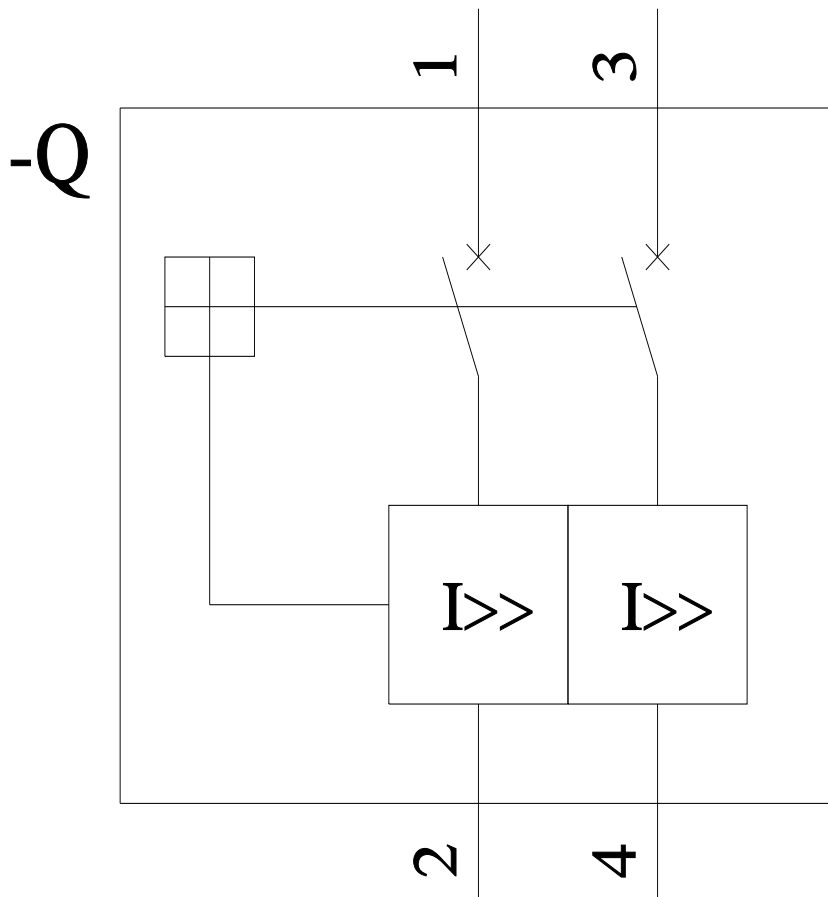
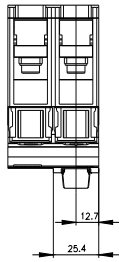
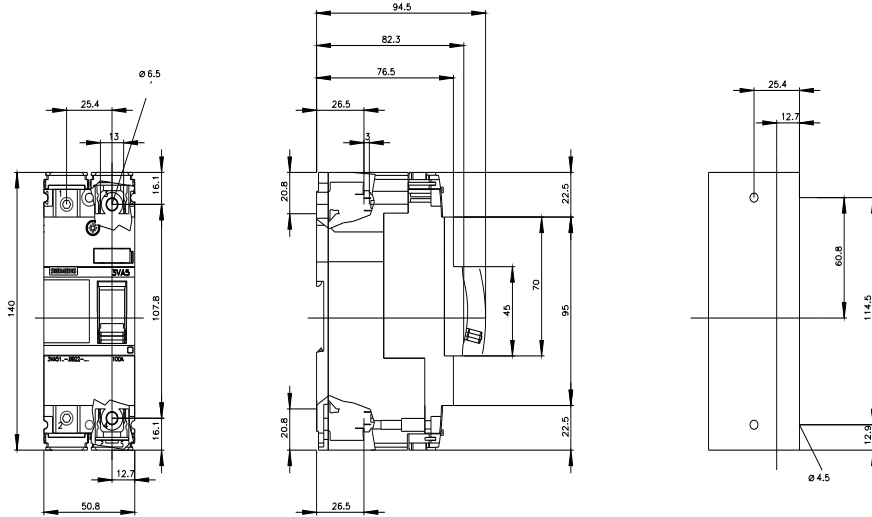
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

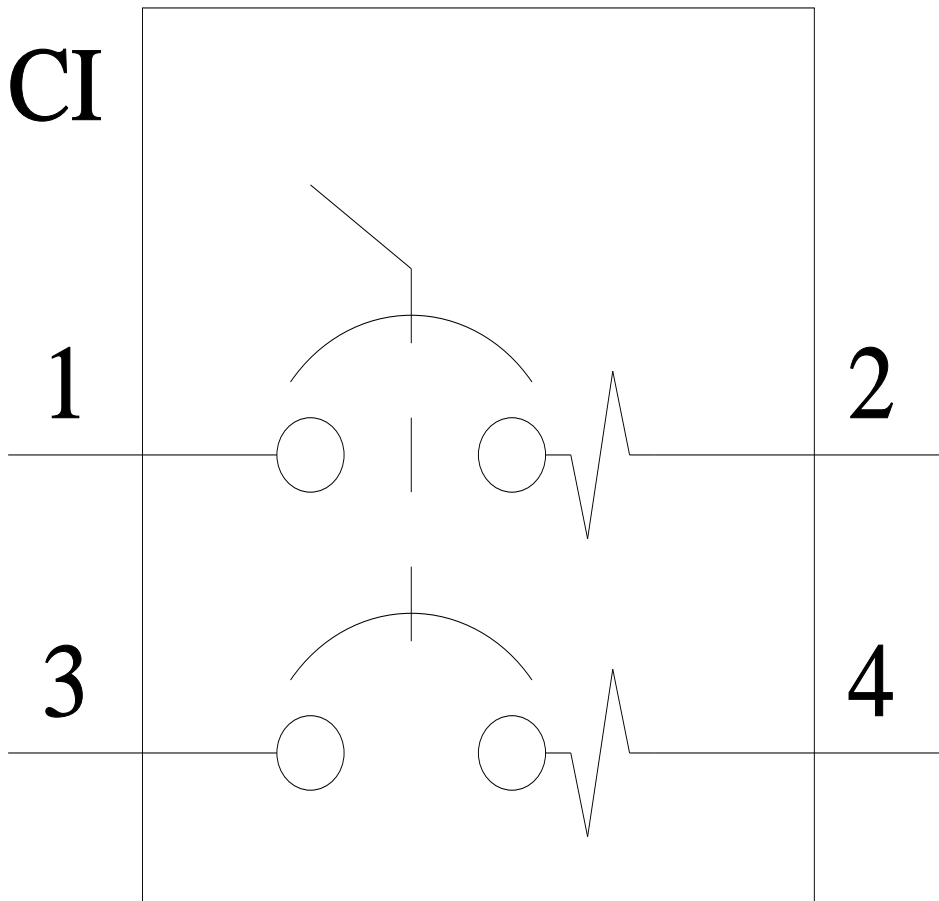
<https://support.industry.siemens.com/cs/ww/en/ps/3VA5110-1BB22-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5110-1BB22-0AA0

CAX-Online-Generator





last modified:

7/14/2022 

