



circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 277V
1-pole, line protection TM210, FTFM, $I_n=90A$ overload protection $I_r=90A$
fixed short-circuit protection $I_i=10 \times I_n$ without connection

Model	
product brand name	SETRON
product designation	Molded-case circuit breaker
product designation / according to UL file	SEAS
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
protection function of the overcurrent release	LI
number of poles	1
General technical data	
rated insulation voltage U_i	500 V
Max. rated operational voltage U_e with DC	125 V
power loss [W] / maximum	7.13 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	7.13 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
product function	
• communication function	No
• other measurement function	No
Current	
marking / acc. to UL 489 / 100%-rated breaker	No
operational current	
• at 45 °C	88 A
• at 50 °C	86 A
• at 55 °C	84 A
• at 60 °C	82 A
• at 65 °C	80 A
• at 70 °C	79 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	S

breaking capacity maximum short-circuit current (I _{cu})	
• at 240 V	25 kA
• at 415 V	5 kA
breaking capacity operating short-circuit current (I _{cs})	
• at 240 V	25 kA
• at 415 V	5 kA
short-circuit current making capacity (I _{cm})	
• at 240 V	52.5 kA
• at 415 V	7.5 kA
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

Switching capacity according to UL 489

breaking capacity current	
• at 120 V	65 kA
• at 277 V	25 kA
• at 347 V	14 kA

Adjustable parameters

Adjustable response value current / I _g min.	90 A
Adjustable response value current / I _g min.	90 A
Ground fault protection / tripping switchable / I _{2t} =ON/OFF	No

Mechanical Design

height [in]	5.51 in
Height	140 mm
width [in]	1 in
Width	25.4 mm
depth [in]	3.01 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

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 / acc. to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	No

General Product Approval



[Miscellaneous](#)

General Product Approval	EMC	Declaration of Conformity	Test Certificates
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[UK Declaration of Conformity](#)



[Special Test Certificate](#)

[Miscellaneous](#)

Marine / Shipping	other
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[Miscellaneous](#)

[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=3VA5190-4ED11-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5190-4ED11-0AA0>

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

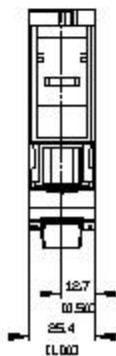
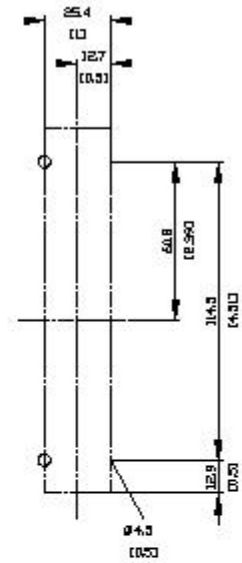
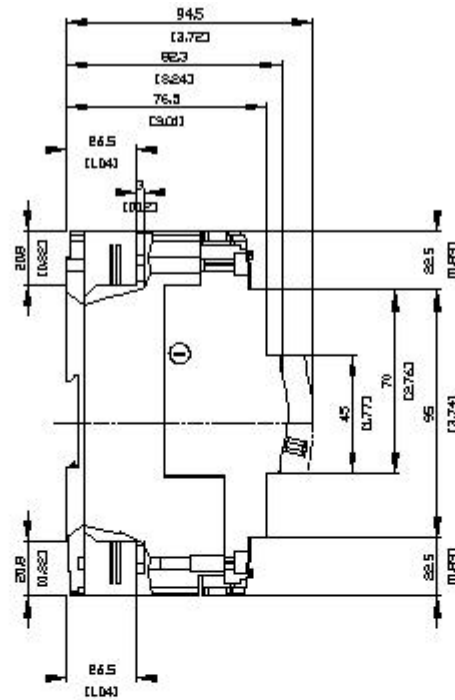
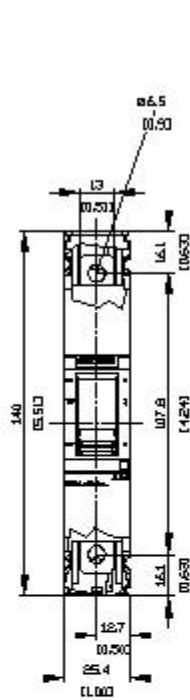
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5190-4ED11-0AA0

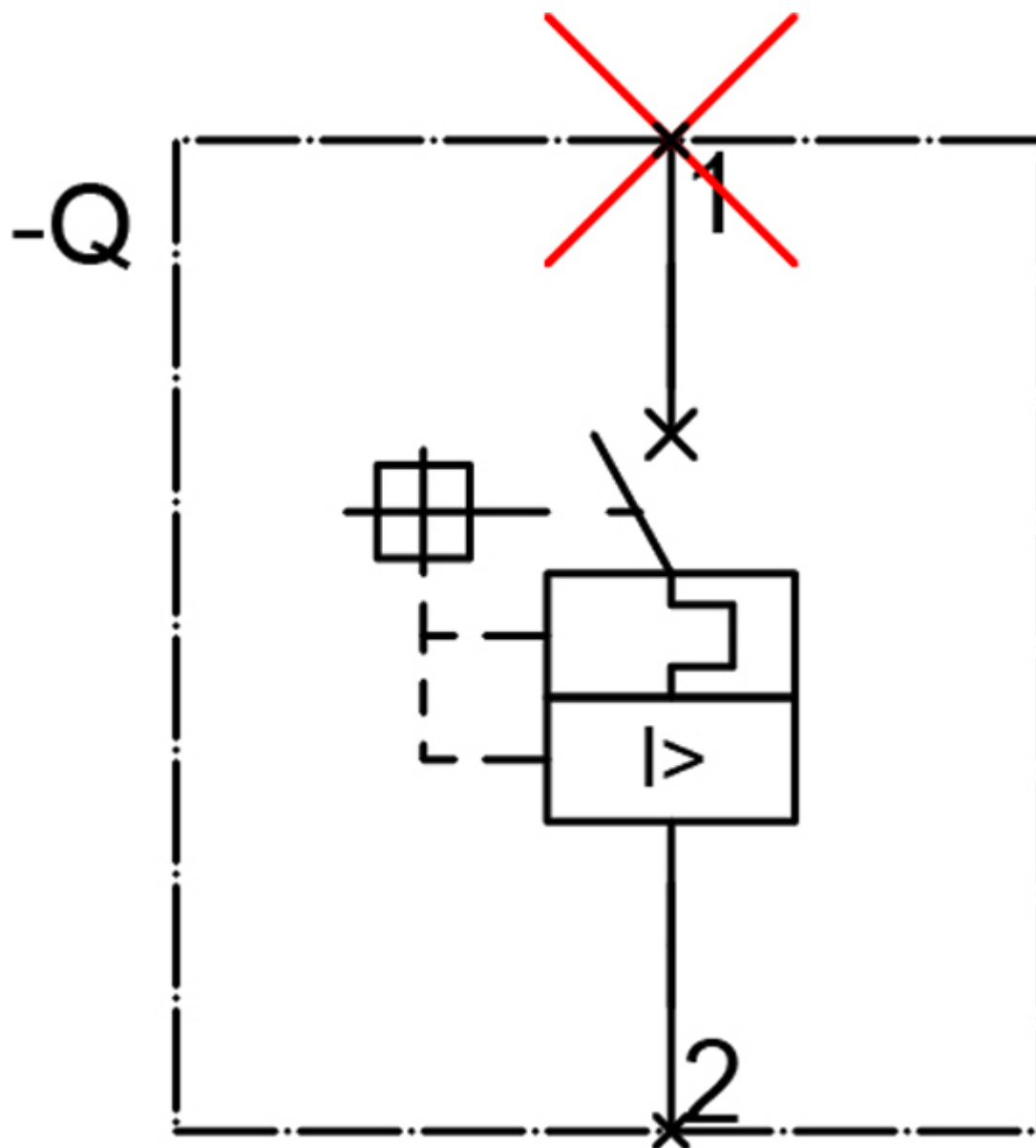
CAX-Online-Generator

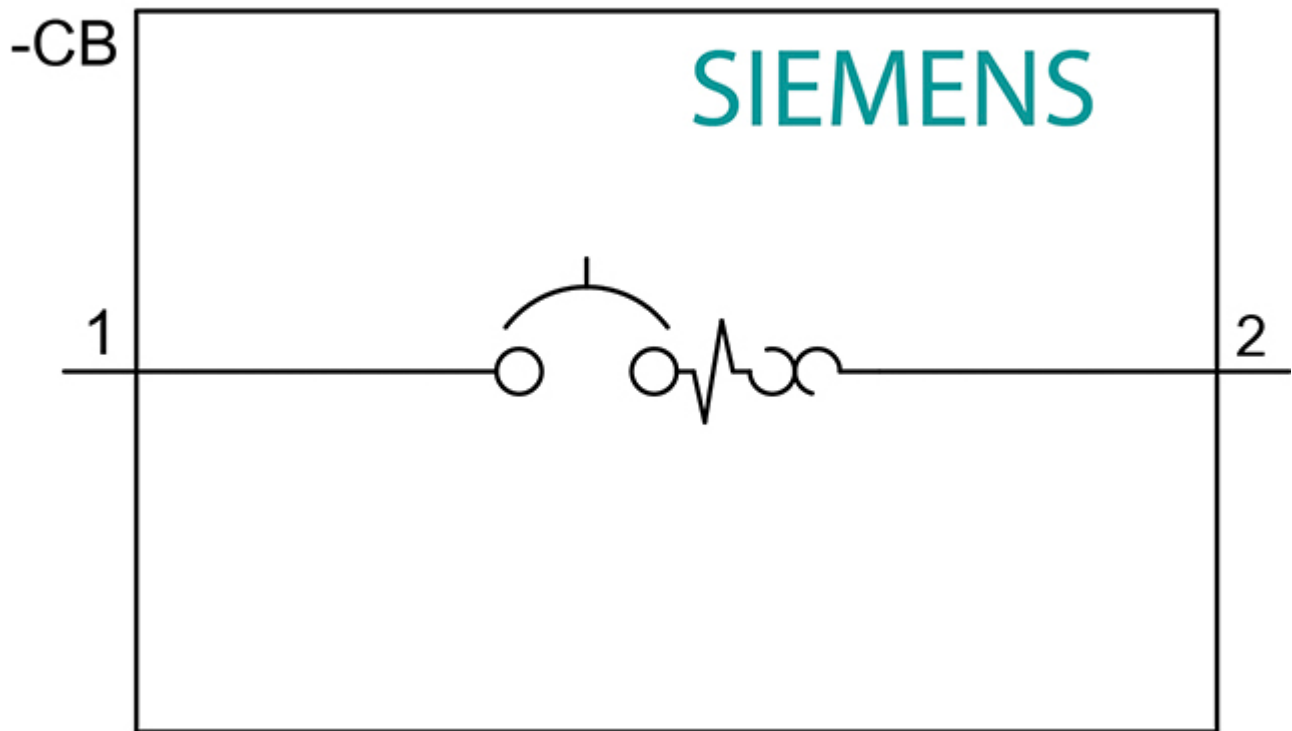
<http://www.siemens.com/cax>

Tender specifications

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







last modified:

8/3/2021 