



circuit breaker 3VA4 UL frame 125 breaking capacity class S 25kA @ 480 V 3-pole, line protection TM210, FTFM, In=45A overload protection Ir=45A fixed short-circuit protection li=10 x In clamp connection

Model	
product brand name	SETRON
product designation	Molded-case circuit breaker
product designation / according to UL file	SEAB
Product version	System protection
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)	Yes
design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)	No
design of the overcurrent release	TM210
protection function of the overcurrent release	LI
number of poles	3
General technical data	
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	10.6 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	3.53 W
mechanical service life (switching cycles) / typical	15 000
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	0.743 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	45 A
• at 45 °C	44 A
• at 50 °C	43 A
• at 55 °C	43 A
• at 60 °C	42 A
• at 65 °C	41 A
• at 70 °C	40 A
Switching capacity according to IEC 60947	

switching capacity class of the circuit breaker	S
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	
<ul style="list-style-type: none"> <li>at 240 V</li> <li>at 480 Y/277 V</li> <li>at 480 V</li> <li>at 600 Y/347 V</li> </ul>	65 kA 25 kA 25 kA 14 kA

### Adjustable parameters

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

height [in]	5.09 in
Height	129.4 mm
width [in]	3 in
Width	76.2 mm
depth [in]	2.96 in
depth	75.1 mm

### Connections

type of electrical connection / for main current circuit	Infeed side: Low tab
Type of connectable conductor cross-section, round conductor terminal, stranded	1 x (8 AWG - 3/0)
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	Tin

### Auxiliary circuit

product component	
<ul style="list-style-type: none"> <li>undervoltage release</li> <li>voltage trigger</li> <li>trip indicator</li> </ul>	No No 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	
<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

General Product Approval	EMC	other
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[Miscellaneous](#)



[Miscellaneous](#)

### other

[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=3VA4145-4ED34-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA4145-4ED34-0AA0>

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

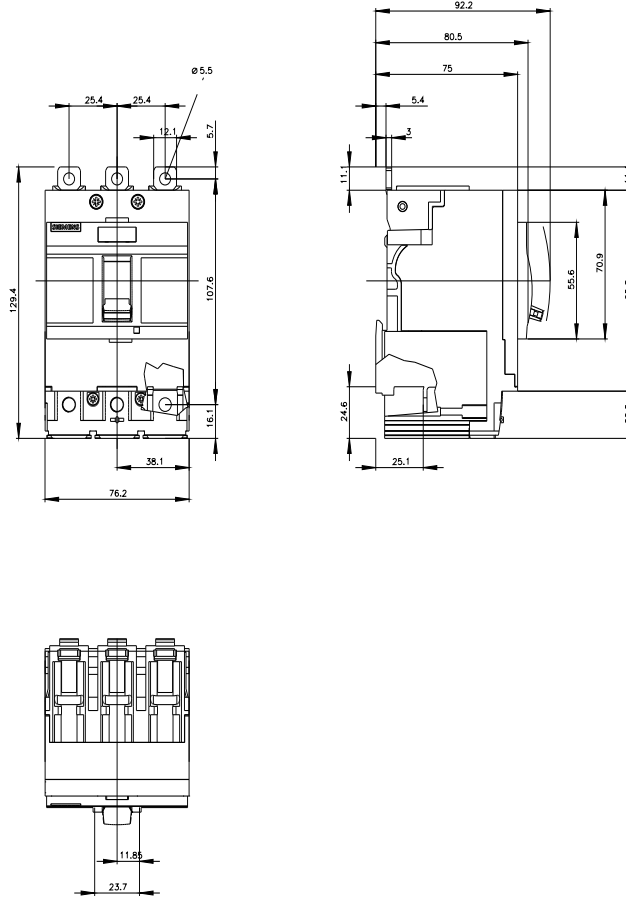
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA4145-4ED34-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4145-4ED34-0AA0)

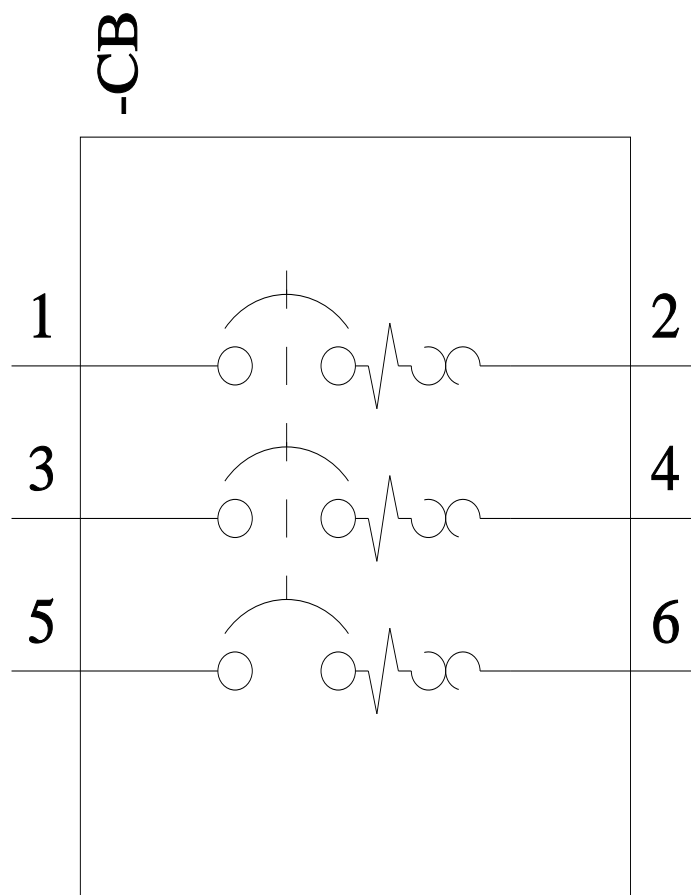
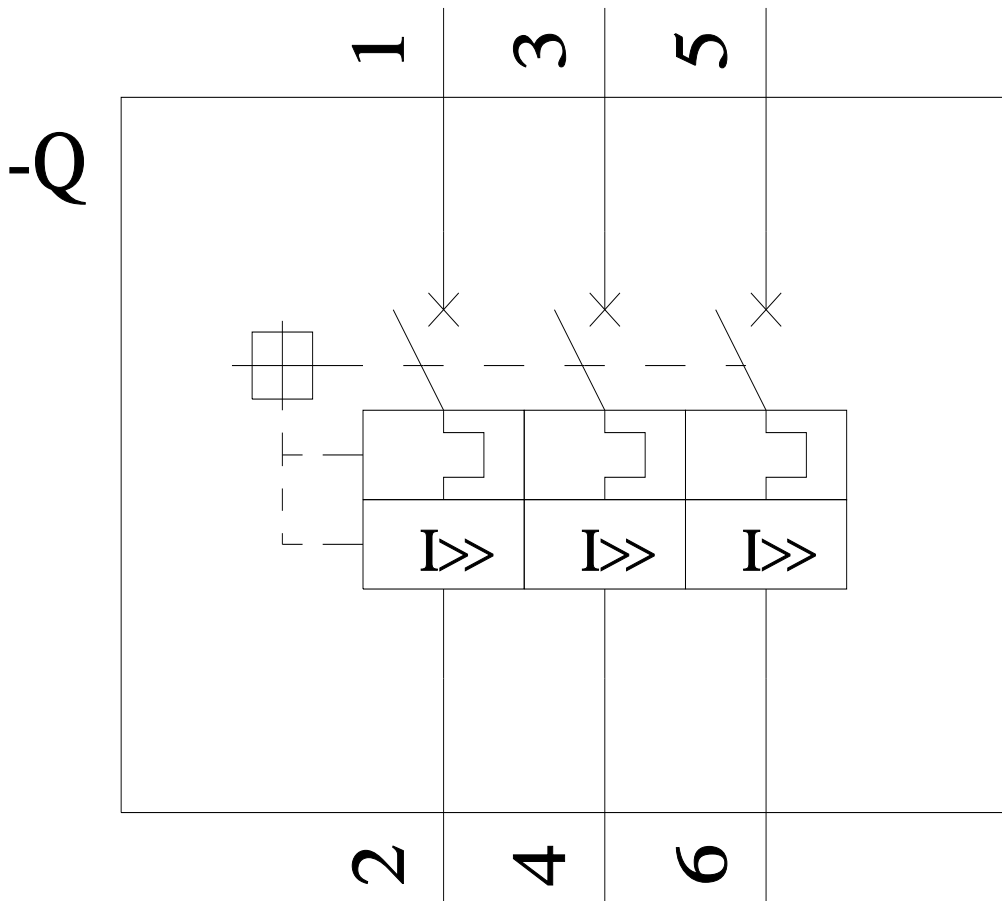
CAX-Online-Generator

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

Tender specifications

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





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