



circuit breaker 3VA4 UL frame 125 breaking capacity class S 25kA @ 480 V 2-pole, line protection TM210, FTFM, In=80A overload protection Ir=80A fixed short-circuit protection li=10 x In clamp connection

Model	
product brand name	SETRON
product designation	Molded-case circuit breaker
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	2
General technical data	
power loss [W] / maximum	11 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	5.5 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
Current	
marking / acc. to UL 489 / 100%-rated breaker	No
Max. rated operational current of the frame size	125 A
Courant permanent assigné lu	80 A
operational current	
• at 40 °C	80 A
• at 45 °C	78 A
• at 50 °C	77 A
• at 55 °C	75 A
• at 60 °C	74 A
• at 65 °C	72 A
• at 70 °C	70 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		
Adjustable response value current / li min.	800 A	
Adjustable response value current / li max.	800 A	
Ground fault protection / tripping switchable / I2t=ON/OFF	No	
Mechanical Design		
height [in]	5.1 in	
Height	129.4 mm	
width [in]	2 in	
Width	50.8 mm	
depth [in]	3 in	
depth	75.1 mm	
Connections		
arrangement of electrical connectors / for main current circuit	Load side: Circular conductor terminal	
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)	
Auxiliary circuit		
number of CO contacts / for auxiliary contacts	0	
Accessories		
product extension / optional / motor drive	No	
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		
reference code / acc. to IEC 81346-2	Q	
<b>General Product Approval</b>	<b>EMC</b>	<b>other</b>



[Miscellaneous](#)



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### 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=3VA4180-4ED24-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA4180-4ED24-0AA0>

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

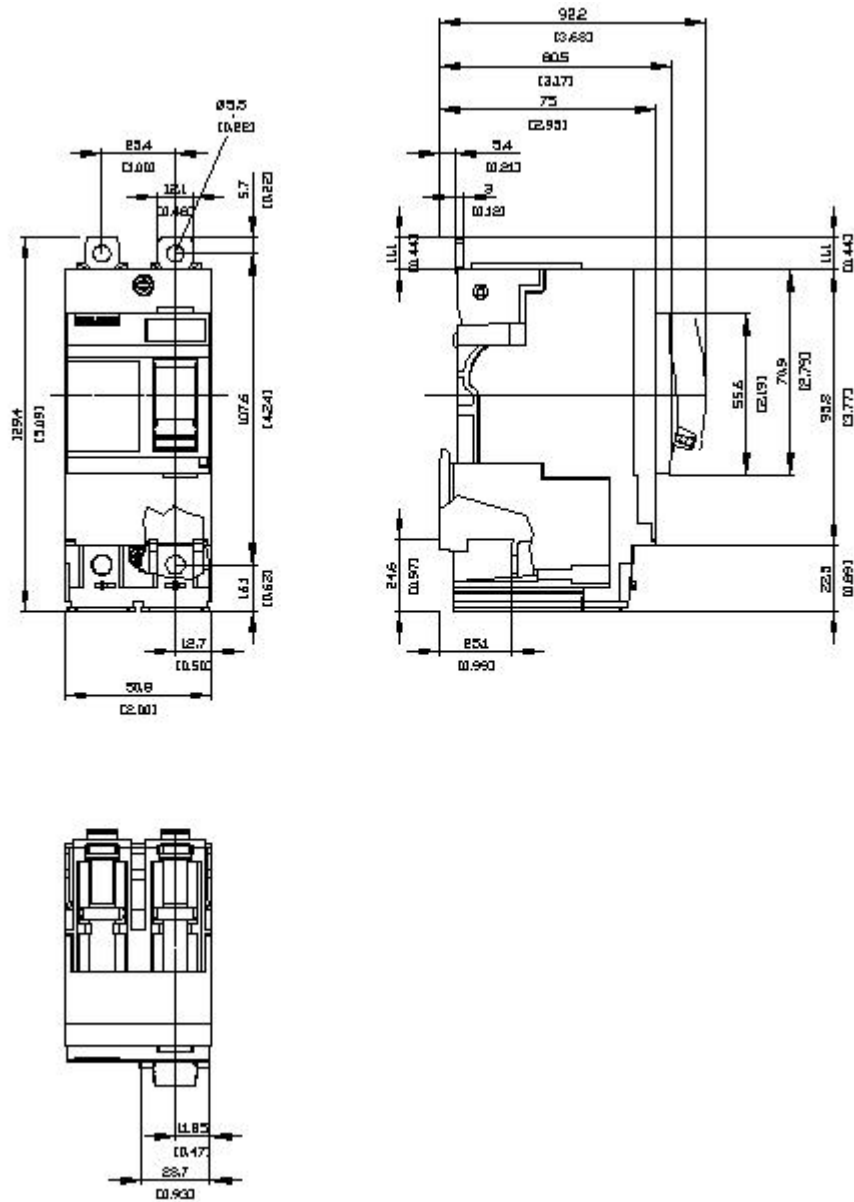
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA4180-4ED24-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4180-4ED24-0AA0)

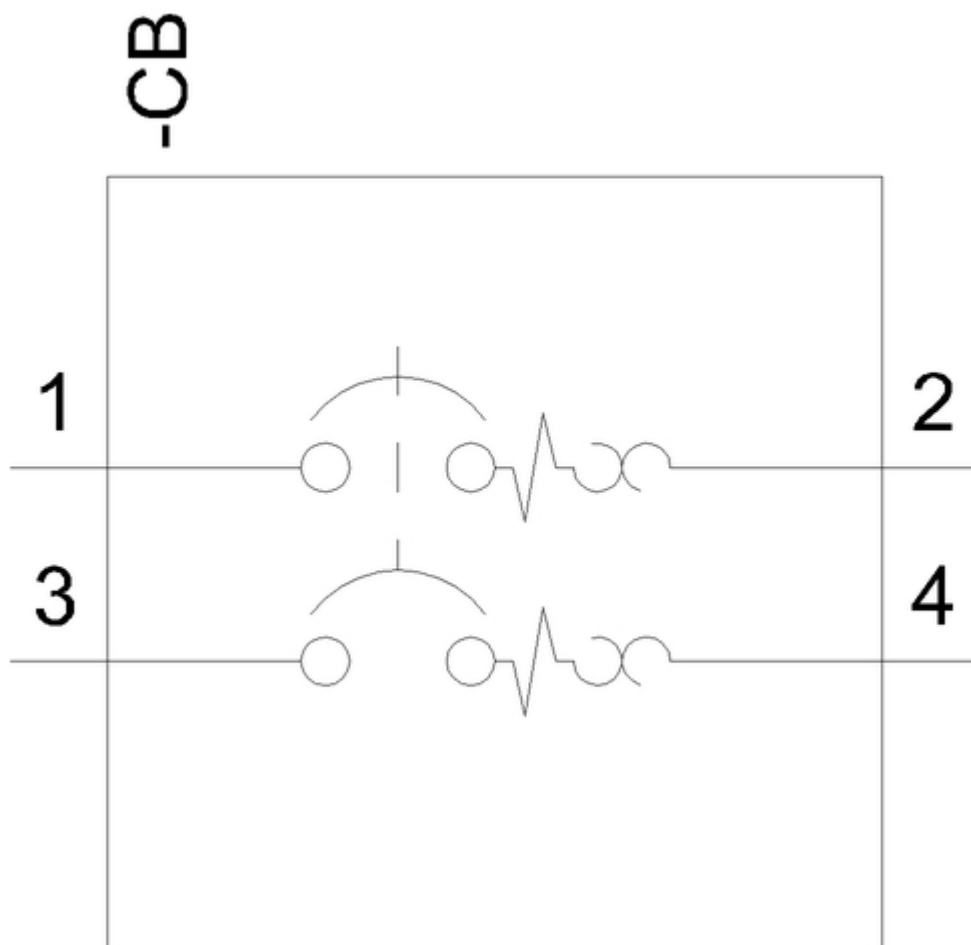
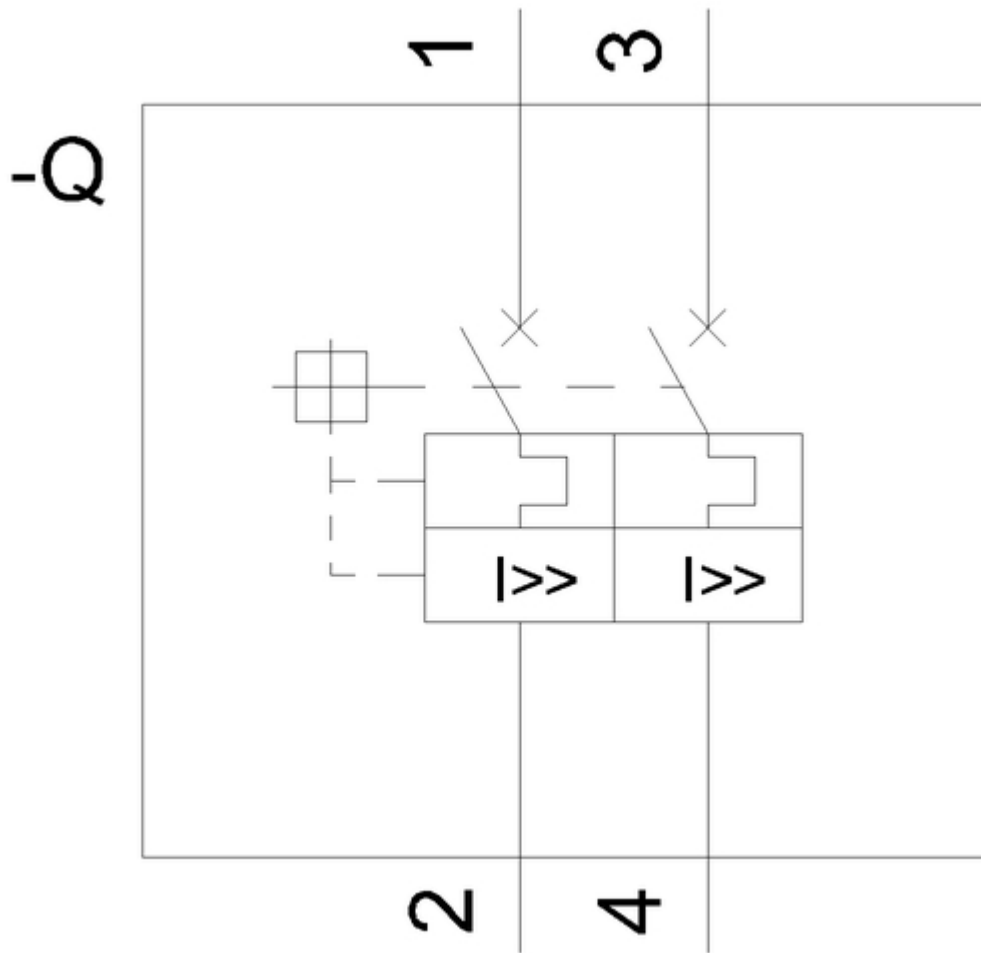
**CAX-Online-Generator**

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

**Tender specifications**

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





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