## 3VA4120-4ED24-0AA0

**Data sheet** 



circuit breaker 3VA4 UL frame 125 breaking capacity class S 25kA @ 480 V 2-pole, line protection TM210, FTFM, In=20A overload protection Ir=20A fixed short-circuit protection Ii=15 x In clamp connection

Model			
product brand name	SENTRON		
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 load switch / acc. to UL 489 / High-Intensity- Discharge circuit breaker (HID Type)	Yes		
design of the load switch / acc. to UL 489 / Switching Duty circuit breaker (SWD 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	5.6 W		
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	2.8 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/retrofittable	No		
ground-fault monitoring version	Without		
product function			
<ul> <li>communication function</li> </ul>	No		
<ul> <li>other measurement function</li> </ul>	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	20 A		
operational current			
• at 40 °C	20 A		
• at 45 °C	20 A		
• at 50 °C	19 A		
● at 55 °C	19 A		
• at 60 °C	18 A		
● at 65 °C	18 A		
• at 70 °C	17 A		
Switching capacity according to IEC 60947			

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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					
• at 240 V	65 kA				
• at 480 Y/277 V	25 kA				
• at 480 V	25 kA				
• at 600 Y/347 V	14 kA				
Adjustable parameters					
Adjustable response value current / li min.	300 A	300 A			
Adjustable response value current / li max.	300 A	300 A			
Ground fault protection / tripping switchable / I2t=ON/OFF	No				
Mechanical Design					
height [in]	5.1 in				
Height	129.4	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 (14 AWG - 8 AWG)				
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	IP40			
ambient temperature					
<ul><li>during operation / minimum</li></ul>	-25 °C				
<ul><li>during operation / maximum</li></ul>	70 °C	70 °C			
<ul> <li>during storage / minimum</li> </ul>	-40 °(	-40 °C			
<ul> <li>during storage / maximum</li> </ul>	0° C				
Certificates					
reference code / acc. to IEC 81346-2	Q				
General Product Approval		EMC	other		



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=3VA4120-4ED24-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA4120-4ED24-0AA0

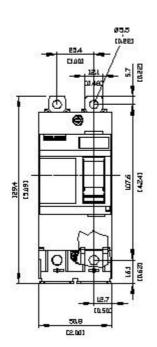
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$ 

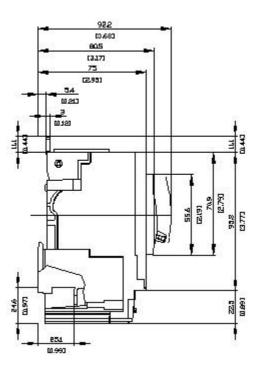
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA4120-4ED24-0AA0

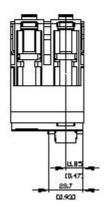
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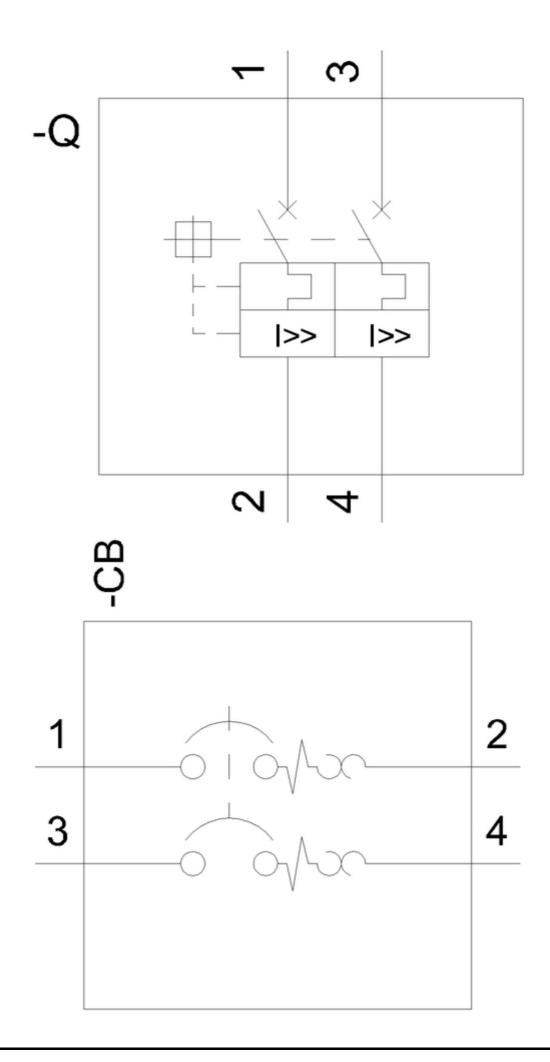
http://www.siemens.com/cax

**Tender specifications** 









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