



circuit breaker 3VA4 UL frame 125 breaking capacity class M 35kA @ 480 V 2-pole, line protection TM210, FTFM, In=20A overload protection Ir=20A fixed short-circuit protection li=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/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	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	

switching capacity class of the circuit breaker	M	
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	
<b>Switching capacity according to UL 489</b>		
breaking capacity current		
• at 240 V	85 kA	
• at 480 Y/277 V	35 kA	
• at 480 V	35 kA	
• at 600 Y/347 V	18 kA	
<b>Adjustable parameters</b>		
Adjustable response value current / li min.	300 A	
Adjustable response value current / li max.	300 A	
Ground fault protection / tripping switchable / I2t=ON/OFF	No	
<b>Mechanical Design</b>		
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	
<b>Connections</b>		
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)	
<b>Auxiliary circuit</b>		
number of CO contacts / for auxiliary contacts	0	
<b>Accessories</b>		
product extension / optional / motor drive	No	
<b>Environmental conditions</b>		
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	
<b>Certificates</b>		
reference code / acc. to IEC 81346-2	Q	
<b>General Product Approval</b>	<b>EMC</b>	<b>other</b>



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=3VA4120-5ED24-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA4120-5ED24-0AA0>

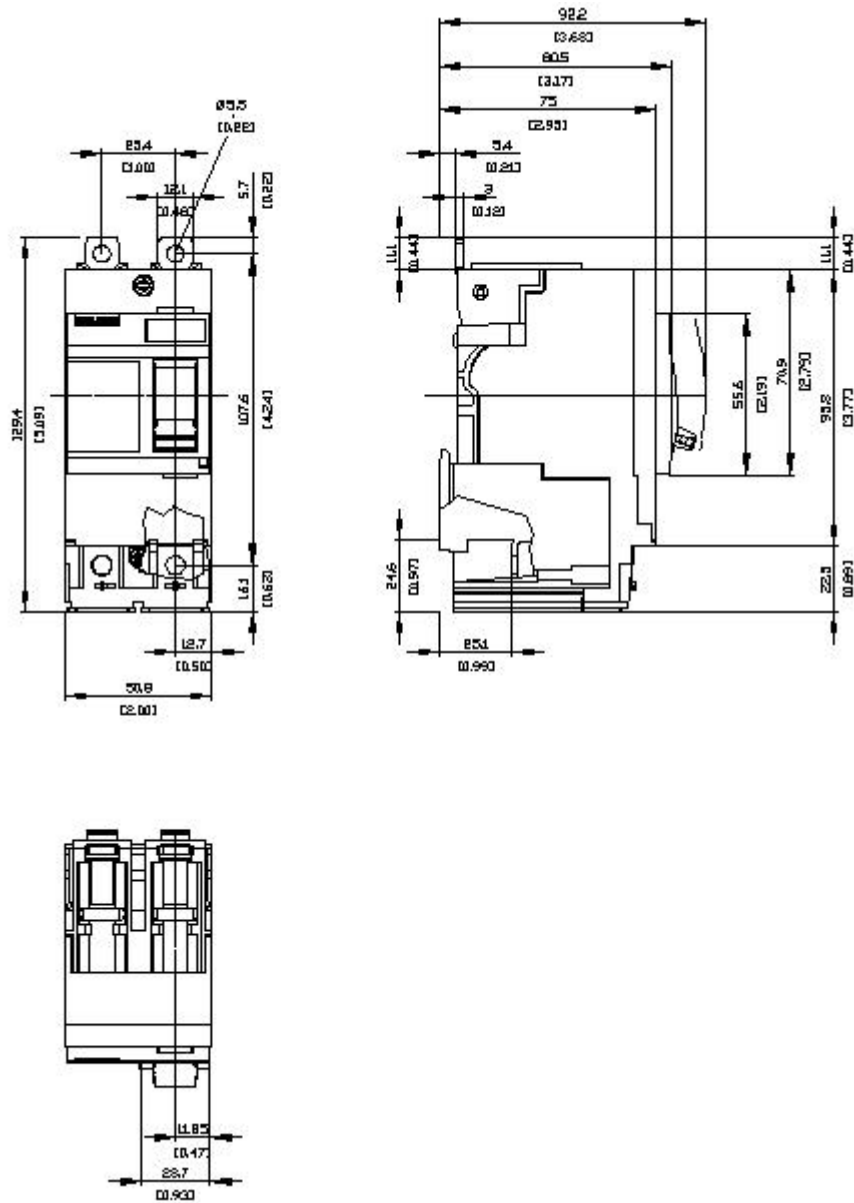
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

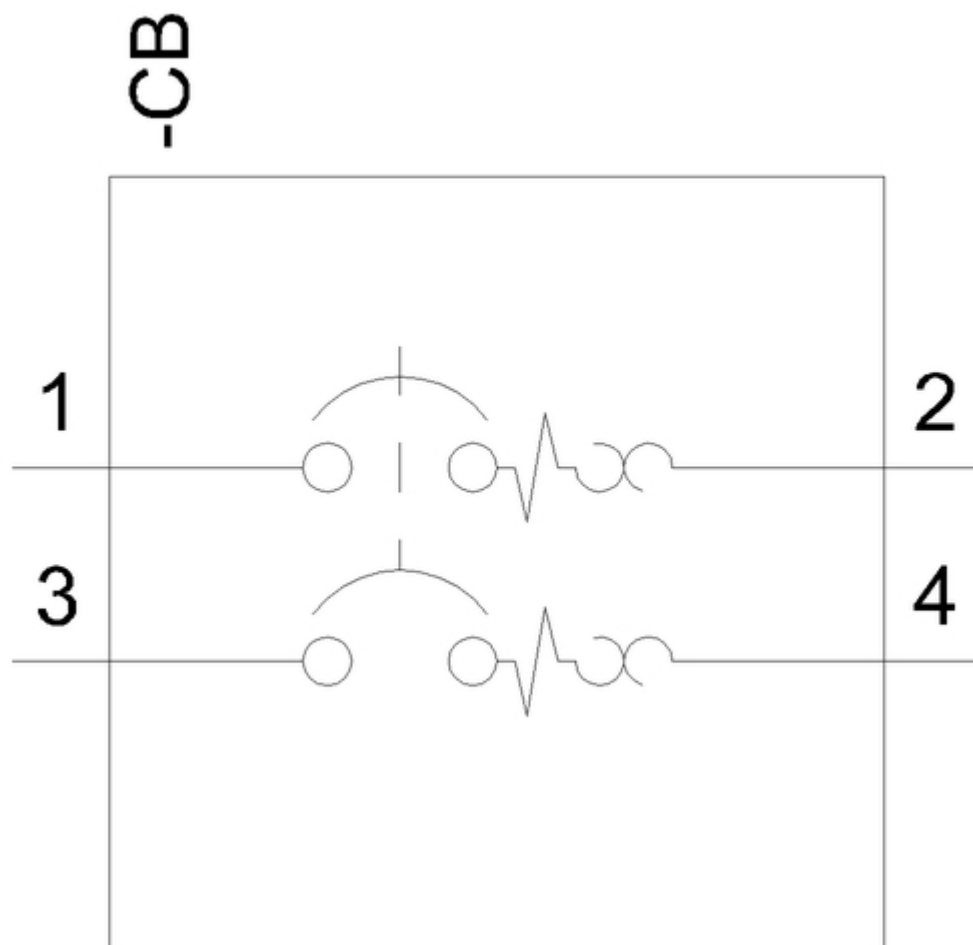
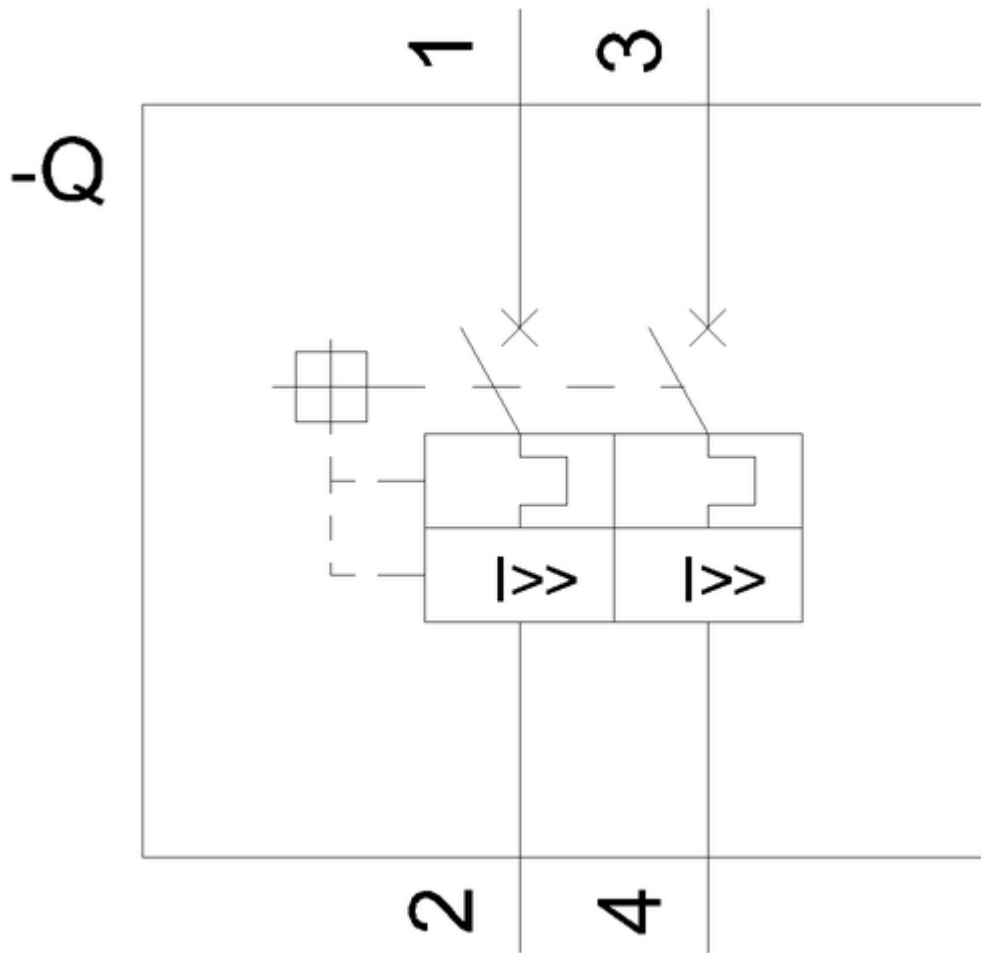
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA4120-5ED24-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4120-5ED24-0AA0)

CAX-Online-Generator

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

Tender specifications





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