



circuit breaker 3VA5 UL frame 125 breaking capacity class H 50kA @ 277V  
 1-pole, line protection TM210, FTFM, In=20A overload protection Ir=20A  
 fixed short-circuit protection li=15 x In without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	H5EAS
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)	Yes
design of the overcurrent release	TM210
protection function of the overcurrent release	LI
number of poles	1
General technical data	
rated insulation voltage Ui	500 V
Max. rated operational voltage Ue with DC	125 V
operating voltage / at AC / rated value	415 V
power loss [W] / maximum	4.07 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	4.07 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
ground-fault monitoring version	without
product function	
• communication function	No
• other measurement function	No
Net Weight	0.383 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	20 A
• at 45 °C	20 A
• at 50 °C	19 A

<ul style="list-style-type: none"> <li>• at 55 °C</li> <li>• at 60 °C</li> <li>• at 65 °C</li> <li>• at 70 °C</li> </ul>	19 A 19 A 18 A 18 A
<b>Switching capacity according to IEC 60947</b>	
switching capacity class of the circuit breaker	H
breaking capacity maximum short-circuit current (Icu) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> </ul>	55 kA 5 kA
breaking capacity operating short-circuit current (Ics) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> </ul>	55 kA 5 kA
short-circuit current making capacity (Icm) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> </ul>	121 kA 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
<b>Switching capacity according to UL 489</b>	
breaking capacity current <ul style="list-style-type: none"> <li>• at 120 V</li> <li>• at 277 V</li> <li>• at 347 V</li> </ul>	100 kA 50 kA 18 kA
<b>Adjustable parameters</b>	
Adjustable response value current / I <sub>g</sub> min.	20 A
Adjustable response value current / I <sub>g</sub> min.	20 A
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	No
<b>Mechanical Design</b>	
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
<b>Connections</b>	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
<b>Auxiliary circuit</b>	
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
<b>Accessories</b>	
product extension / optional / motor drive	No
<b>Environmental conditions</b>	
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
<b>Certificates</b>	
reference code / according to IEC 81346-2	Q
<b>General Product Approval</b>	



[Confirmation](#)



General Product Approval

EMC

Declaration of Conformity

Test Certificates

[Miscellaneous](#)



EG-Konf.



[Miscellaneous](#)

Test Certificates

Marine / Shipping

[Special Test Certificate](#)



LRS



RMRS

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=3VA5120-6ED11-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5120-6ED11-0AA0>

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

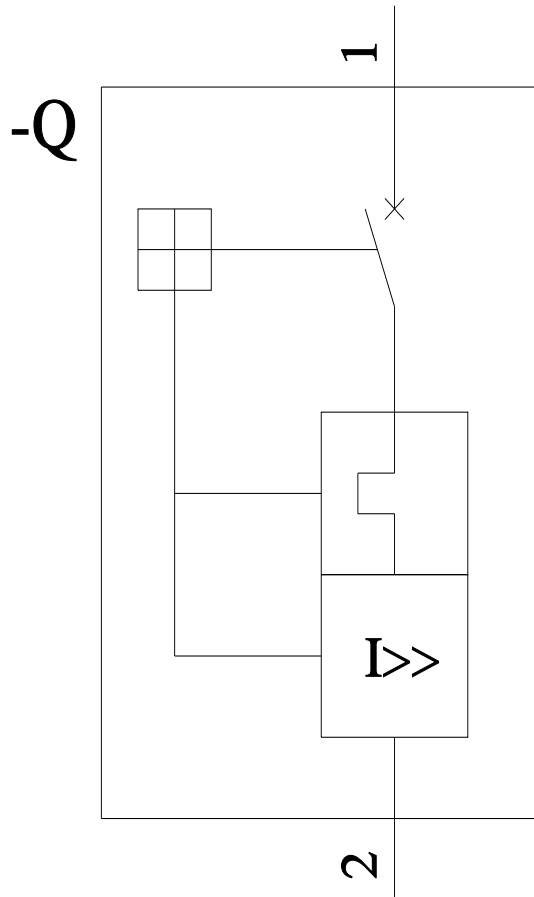
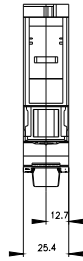
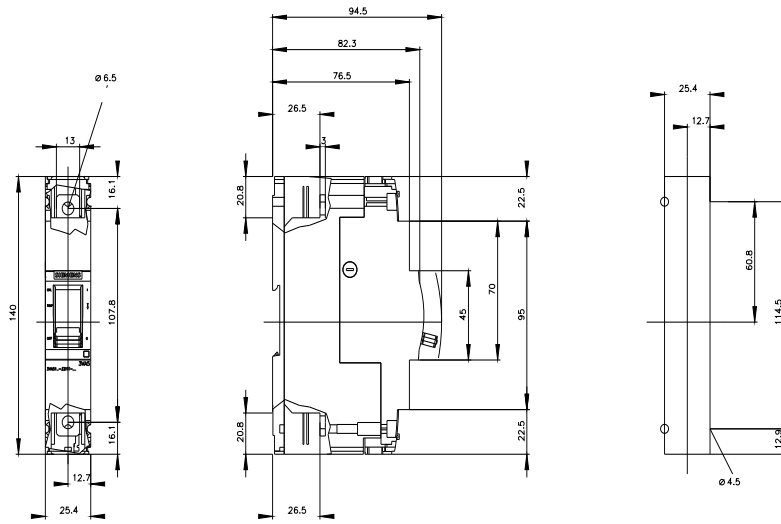
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5120-6ED11-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5120-6ED11-0AA0)

CAx-Online-Generator

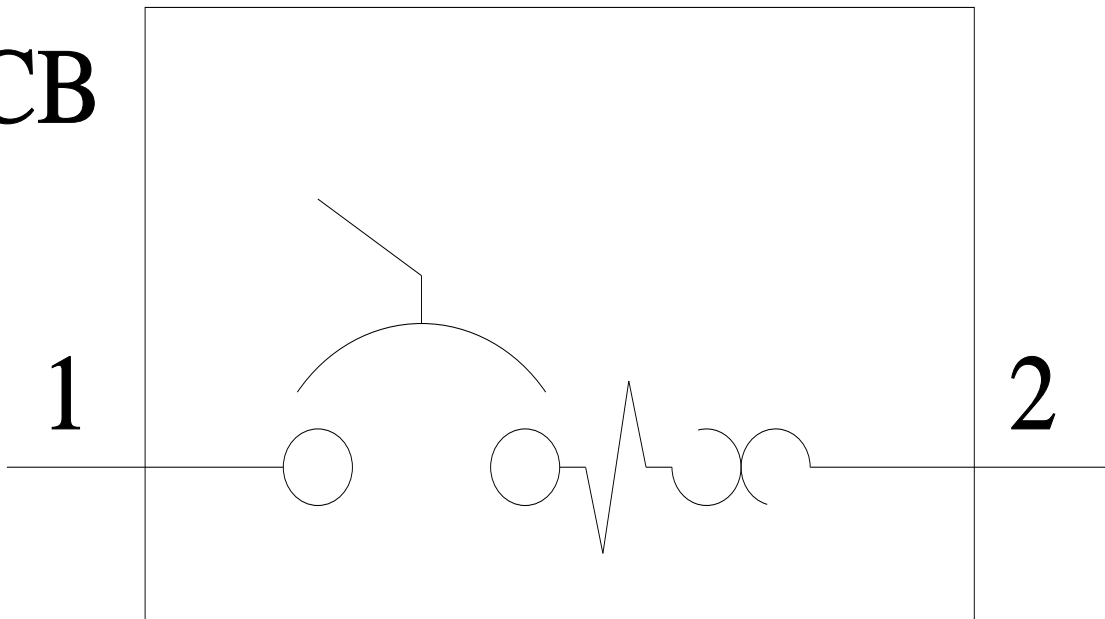
<http://www.siemens.com/cax>

Tender specifications

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



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