## 3VA5102-1MH31-0AA0

**Data sheet** 



circuit breaker 3VA5 UL frame 125 3-pole, starter protection TM120M, AM, In=2A without overload protection short-circuit protection Ii=5...12 x In without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HEAP
design of the product	Starter 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)	No
design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)	No
design of the overcurrent release	TM120M
protection function of the overcurrent release	T. Control of the Con
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	4 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.43 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	8 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	4 000
electrical endurance (operating cycles) / at 480 V	8 000
electrical endurance (operating cycles) / at 600 V	4 000
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	No
ground-fault monitoring version	without
product function	
communication function	No
phase failure detection	No
other measurement function	No
Net Weight	740 g
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	2 A
• at 45 °C	2 A
● at 50 °C	2 A
● at 55 °C	2 A
• at 60 °C	2 A
● at 65 °C	2 A

● at 70 °C	2 A
Switching capacity according to IEC 60947	
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	150 kA
• at 415 V	70 kA
• at 690 V	10 kA
operating short-circuit current breaking capacity (lcs)	10 NA
• at 240 V	150 kA
• at 415 V	70 kA
• at 690 V	5 kA
short-circuit current making capacity (Icm)	JM
at 240 V	330 kA
	154 kA
• at 415 V	
• at 690 V	17 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
Adjustable parameters	
adjustable response value setting current (li) / for I-tripping	
• minimum	10 A
• maximum	24 A
adjustable setting current (InN) / for N-tripping	
• minimum	0 A
• maximum	0 A
product function / grounding protection	No
Mechanical Design	
product component	
undervoltage release	No
<ul> <li>voltage trigger</li> </ul>	No
• trip indicator	No
height [in]	5.51 in
height	140 mm
width [in]	3 in
width	76.2 mm
depth [in]	3.01 in
depth	76.5 mm
Connections	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	Yes
Environmental conditions	100
	ID40
protection class IP / on the front	IP40
ambient temperature	25 %
during operation / minimum	-25 °C
during operation / maximum	70 °C
during storage / minimum	-40 °C
during storage / maximum	80 °C
Certificates	
reference code / according to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes
General Product Approval	



Confirmation







Miscellaneous

General Product Approval

EMC

**Declaration of Conformity** 

**Test Certificates** 









Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping

other



**Miscellaneous** 

Confirmation

**Miscellaneous** 

## **Further information**

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3VA5102-1MH31-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5102-1MH31-0AA0

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

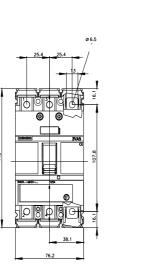
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA5102-1MH31-0AA0

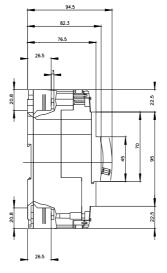
**CAx-Online-Generator** 

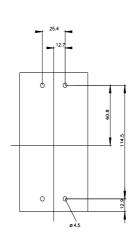
http://www.siemens.com/cax

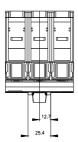
**Tender specifications** 

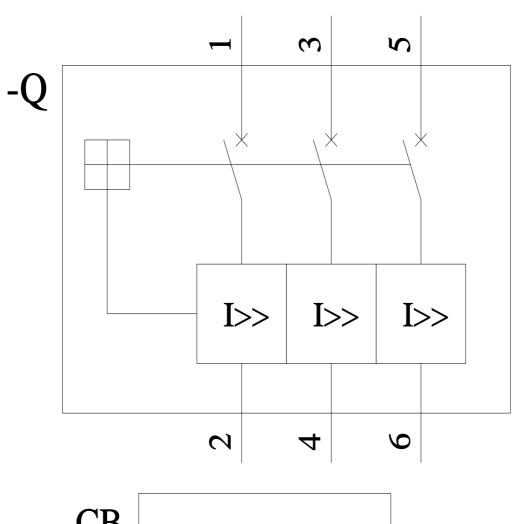
http://www.siemens.com/specifications

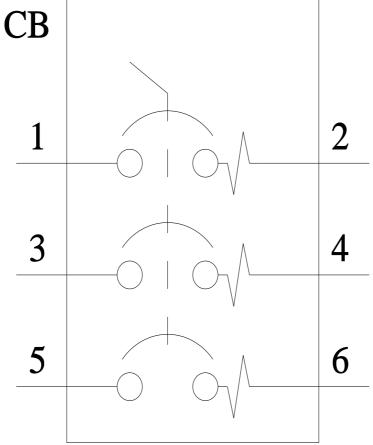












last modified: 7/14/2022 🖸

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

3VA51021MH310AA0