

circuit breaker 3VA5 UL frame 125 3-pole, starter protection TM120M, AM, In=3A without overload protection short-circuit protection $I_i=3...7 \times I_n$ without connection



Model	
Product brand name	SENTRON
Product designation	Molded-case circuit breaker
Product designation / according to UL-File	HEAP
Product version	Starter 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	TM110M
Protective function of the overcurrent release	I
Number of poles	3

General technical data	
Rated insulation voltage U_i	800 V
Max. rated operational voltage U_e with AC 50/60Hz	690 V
Power loss [W] / maximum	9.8 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	3.27 W
Latching - endurance	15 000

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 / at 50/60 Hz	8 000
Electrical endurance (switching cycles) / at 600 V / at 50/60 Hz	4 000
Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Without
Product function	
• communication function	No
• other measurement function	No

Electricity

Marking / acc. to UL 489 / 100%-rated breaker	No
Max. rated operational voltage of the size of the circuit-breaker	125 A
Rated continuous current I _u	3 A
Operating current	
• at 40 °C	3 A
• at 45 °C	3 A
• at 50 °C	3 A
• at 55 °C	2.91 A
• at 60 °C	2.85 A
• at 65 °C	2.76 A
• at 70 °C	2.64 A

Adjustable parameters

Ground fault protection / tripping switchable / I _{2t} =ON/OFF	No
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Mechanical Design

Height [in]	5.5 in
Height	140 mm
Width [in]	3 in
Width	76.2 mm
Depth [in]	3 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
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Accessories

Product extension / optional / motor drive Yes

Environmental conditions

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

Certificates

Reference code / acc. to DIN EN 81346-2 Q

Certificate of suitability / as approval for NAVAL (no combat vessels) / Supplement SB Yes

General Product Approval

EMC

Declaration of Conformity



[Miscellaneous](#)



Test Certificates

Shipping Approval

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=3VA5103-1MU31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5103-1MU31-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5103-1MU31-0AA0

CAX-Online-Generator

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

Tender specifications

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

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