

CIRCUIT BREAKER 3VA5 UL FRAME 125 3-POLE, MOTOR STARTER PROTECTION TM120M, AM, IN=70A WITHOUT OVERLOAD PROTECTION SHORT CIRCUIT PROTECTION II=5...12 X IN W/O CONNECTION



Model	
product brandname	SENTRON
Type of load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
Number of poles	3

General technical data	
Tension assignée d'isolement $U_i$	800 V
Max. rated operational voltage $U_e$ with AC 50/60Hz	690 V
Max. rated operational voltage $U_e$ with DC	500 V
Active power loss / for rated value of the current / at AC / in hot operating state / per device	10.8 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	3.6 W
Mechanical service life (switching cycles) / typical	15 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000
Electrical lifetime (switching cycles) / at 480 V / at 50/60 Hz	8 000

Electrical lifetime (switching cycles) / at 600 V / at 50/60 Hz	4 000
Neutral conductors / upgradeable/retrofitable	No
Product function	
• communication function	No
• Phase failure detection	No
• other measurement function	No

### Electricity

Marking / according to UL 489 / 100%-rated breaker	No
Max. rated operational voltage of the size of the circuit-breaker	125 A
Courant permanent assigné lu	70 A
Operating current	
• at 40 °C	70 A
• at 45 °C	70 A
• at 50 °C	70 A
• at 55 °C	66.79 A
• at 60 °C	70 A
• at 65 °C	70 A
• at 70 °C	70 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
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	150 kA
• at 415 V	70 kA
• at 690 V	5 kA
Short-circuit current making capacity (Icm)	
• at 240 V	330 kA
• at 415 V	154 kA
• at 690 V	17 kA

### Adjustable parameters

Adjustable response value current / li min.	350 A
Adjustable response value current / li max.	840 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No

### Mechanical Design

Height [in]	5.5 in
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Height	140 mm
Width [in]	3 in
Width	76.2 mm
Depth [in]	3 in
Depth	76.5 mm

#### Auxiliary circuit

Number of CO contacts / for auxiliary contacts	0
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#### Accessories

Product extension / optional / motor drive	Yes
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#### Environmental conditions

Protection class IP / on the front	IP40
Ambient temperature	
<ul style="list-style-type: none"> <li>during operation / minimum</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>during operation / maximum</li> </ul>	70 °C
<ul style="list-style-type: none"> <li>during storage / minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>during storage / maximum</li> </ul>	80 °C

#### Certificates

Equipment marking / acc. to DIN EN 81346-2	Q
Certificate of suitability / as approval for NAVAL (no combat vessels) / Supplement SB	No

General Product Approval	EMC	Declaration of Conformity	other
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#### Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/lowvoltage/catalogs>

**Industry Mall (Online ordering system)**

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA5170-1MH31-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA5170-1MH31-0AA0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3VA5170-1MH31-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA5170-1MH31-0AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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

