

CIRCUIT BREAKER 3VA5 UL FRAME 125 BREAKING CAPACITY CLASS H 65KA @ 480V 3-POLE, LINE PROTECTION TM210, FTFM, IN=20A OVERLOAD PROTECTION IR=20A FIXED SHORT CIRCUIT PROTECTION II=10 X IN UL489 SB (NAVAL), 50 DEG CEL. W/O CONNECTION



Model	
Product brand name	SENTRON
Product designation	Molded-case circuit breaker
Design of the product	System 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	TM210
Protective function of the overcurrent release	LI
Number of poles	3

General technical data	
Active power loss / for rated value of the current / at AC / in hot operating state / per device	12.3 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	4.1 W
Mechanical service life (switching cycles) / typical	15 000
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
Courant permanent assigné lu	20 A
Operating current	
• at 40 °C	20 A
• at 45 °C	20 A
• at 50 °C	20 A
• at 55 °C	19 A
• at 60 °C	19.14 A
• at 65 °C	18.816 A
• at 70 °C	18.5 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	H
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### Switching capacity according to UL 489

Breaking capacity current	
• at 240 V	100 kA
• at 480 Y/277 V	65 kA
• at 480 V	65 kA
• at 600 Y/347 V	25 kA

### Adjustable parameters

Adjustable response value current / lg min.	20 A
Adjustable response value current / lg min.	20 A
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

### 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
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## Environmental conditions

Protection class IP / on the front	IP40
Ambient temperature	
• during operation / minimum	-25 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C

## Certificates

Equipment marking / 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	Shipping Approval	other
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[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=3VA5120-6ED31-1AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5120-6ED31-1AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5120-6ED31-1AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5120-6ED31-1AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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



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