

CIRCUIT BREAKER 3VA5 UL FRAME 250 BREAKING CAPACITY CLASS M 35KA @ 480V 3-POLE, LINE PROTECTION TM230, FTAM, IN=200A OVERLOAD PROTECTION IR=200A FIXED SHORT CIRCUIT PROTECTION II=5...10 X IN 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	TM230
Protective function of the overcurrent release	LI
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	750 V
Active power loss / for rated value of the current / at AC / in hot operating state / per device	42.5 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	14.17 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 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	250 A
Courant permanent assigné Iu	200 A
Operating current	
• at 40 °C	200 A
• at 45 °C	194 A
• at 50 °C	189 A
• at 55 °C	183 A
• at 60 °C	178 A
• at 65 °C	172 A
• at 70 °C	167 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	M
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	7 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	7 kA
Short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 690 V	11.9 kA

### Switching capacity according to UL 489

Breaking capacity current	
• at 240 V	85 kA

- at 480 V 35 kA
- at 600 V 18 kA

#### Adjustable parameters

Adjustable response value current / I <sub>g</sub> min.	200 A
Adjustable response value current / I <sub>g</sub> min.	200 A
Adjustable response value current / I <sub>i</sub> min.	1 000 A
Adjustable response value current / I <sub>i</sub> max.	2 000 A
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	No

#### Mechanical Design

Height [in]	7.3 in
Height	185 mm
Width [in]	4.1 in
Width	105 mm
Depth [in]	3.3 in
Depth	83 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	
<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



CSA



UL



UL



VDE



RCM

Declaration of  
Conformity

EG-Konf.

Shipping  
Approval

ABS

## other

[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=3VA5220-5EC31-0AA0>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/3VA5220-5EC31-0AA0>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5220-5EC31-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5220-5EC31-0AA0)**CAX-Online-Generator**<http://www.siemens.com/cax>**Tender specifications**<http://www.siemens.com/specifications>



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