

circuit breaker 3VA5 UL frame 250 breaking capacity class C 100kA @ 480V 3-pole, line protection TM210, FTFM, $I_n=250A$ overload protection $I_r=250A$ fixed short-circuit protection $I_i=10 \times I_n$ without connection



Model	
Product brand name	SENTRON
Product designation	Molded-case circuit breaker
Product designation / according to UL file	CFAS
Product version	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
protection function of the overcurrent release	LI
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
Max. rated operational voltage U_e with DC	750 V
Power loss [W] / maximum	58 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	19.33 W
Mechanical service life (switching cycles) / typical	20 000

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

Current

Marking / acc. to UL 489 / 100%-rated breaker	No
Max. rated operational current of the frame size	250 A
Rated continuous current I _u	250 A
Operating current	
• at 40 °C	250 A
• at 45 °C	244 A
• at 50 °C	239 A
• at 55 °C	233 A
• at 60 °C	227 A
• at 65 °C	222 A
• at 70 °C	216 A

Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	C
Maximum short-circuit current breaking capacity (I _{cu})	
• at 240 V	200 kA
• at 415 V	110 kA
• at 690 V	10 kA
Operational short-circuit current breaking capacity (I _{cs})	
• at 240 V	200 kA
• at 415 V	110 kA
• at 690 V	10 kA
Short-circuit current making capacity (I _{cm})	
• at 240 V	440 kA
• at 415 V	242 kA
• 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

Switching capacity according to UL 489

Breaking capacity current	
<ul style="list-style-type: none"> • at 240 V • at 480 V • at 600 V 	200 kA 100 kA 35 kA

Adjustable parameters

Adjustable response value current / I _g min.	250 A
Adjustable response value current / I _g min.	250 A
Adjustable response value current / I _i min.	2 500 A
Adjustable response value current / I _i max.	2 500 A
Ground fault protection / tripping switchable / I _{2t} =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"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	-25 °C 70 °C -40 °C 80 °C

Certificates

Reference code / 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

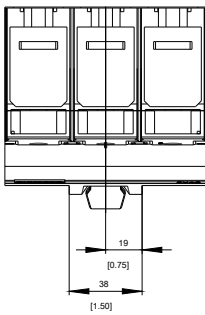
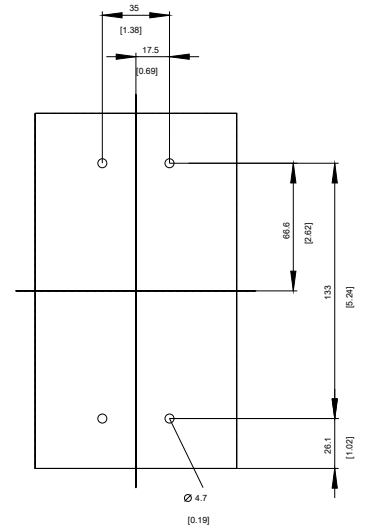
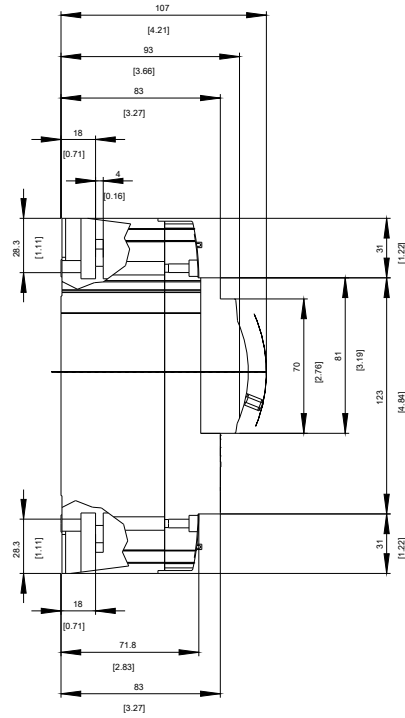
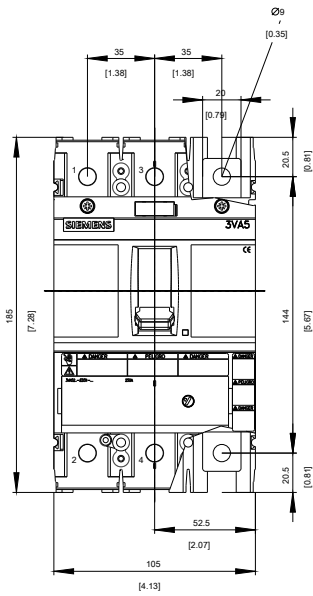
**Declaration of
Conformity****Shipping Ap-
proval****other**

EG-Konf.



ABS

[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=3VA5225-7ED31-0AA0>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/3VA5225-7ED31-0AA0>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5225-7ED31-0AA0**CAX-Online-Generator**<http://www.siemens.com/cax>**Tender specifications**<http://www.siemens.com/specifications>



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