

Circuit breaker 3VA5 UL Frame 250 3-pole, starter protection
 TM120M, AM, In=250A Without overload protection Short-circuit
 protection li=5...10 x In Without connection



Model	
Product brand name	SETRON
Product designation	Molded-case circuit breaker
Product designation / according to UL file	HFAP
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	TM120M
Protective function of the overcurrent release	LI
Number of poles	3

General technical data	
Rated insulation voltage Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 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 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
• Phase failure detection	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

Switching capacity according to IEC 60947

Maximum short-circuit current breaking capacity (I _{cu})	
• at 240 V	100 kA
• at 415 V	70 kA
• at 690 V	10 kA
Operational short-circuit current breaking capacity (I _{cs})	
• at 415 V	100 kA
• at 440 V	70 kA
• at 690 V	10 kA
Short-circuit current making capacity (I _{cm})	
• at 240 V	220 kA
• at 415 V	154 kA
• at 690 V	17 kA

Adjustable parameters

Adjustable response value current / I _r min.	250 A
Adjustable response value current / I _r max.	250 A
Adjustable response value current / I _i min.	1 500 A
Adjustable response value current / I _i max.	3 000 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 	<ul style="list-style-type: none"> -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	Declaration of Conformity
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[Miscellaneous](#)



Shipping Approval

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=3VA5225-0MH31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5225-0MH31-0AA0>

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

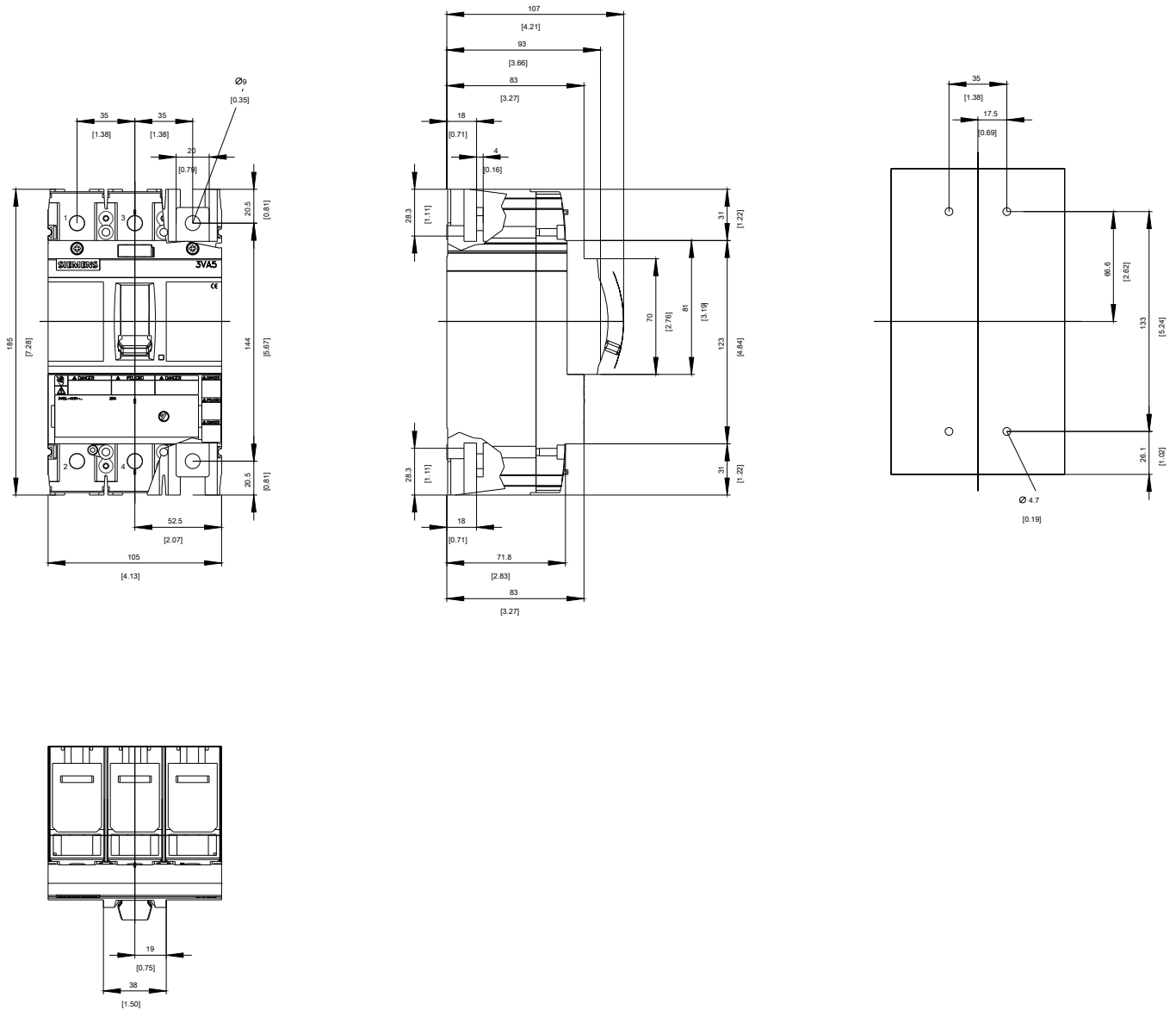
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5225-0MH31-0AA0

CAX-Online-Generator

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

Tender specifications

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



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