

circuit breaker 3VA5 UL frame 250 3-pole, starter protection
TM120M, AM, In=150A without overload protection short-circuit
protection $I_i=6...12 \times I_n$ without connection



Model	
product brand name	SENTRON
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
protection function of the overcurrent release	I
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
power loss [W] / maximum	19.6 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	6.53 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	8 000
electrical endurance (switching cycles) / at 600 V	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
Courant permanent assigné Iu	150 A
operational current	
• at 40 °C	150 A
• at 45 °C	150 A
• at 50 °C	150 A
• at 55 °C	150 A
• at 60 °C	150 A
• at 65 °C	150 A
• at 70 °C	150 A

Switching capacity according to IEC 60947

breaking capacity maximum short-circuit current (Icu)	
• at 240 V	100 kA
• at 415 V	70 kA
• at 690 V	10 kA

Adjustable parameters

Adjustable response value current / Ii min.	750 A
Adjustable response value current / Ii max.	1 800 A
Ground fault protection / tripping switchable / I2t=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	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C

Certificates

reference code / acc. to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	No

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=3VA5215-0MH31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5215-0MH31-0AA0>

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

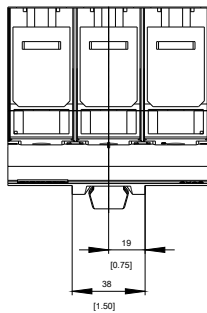
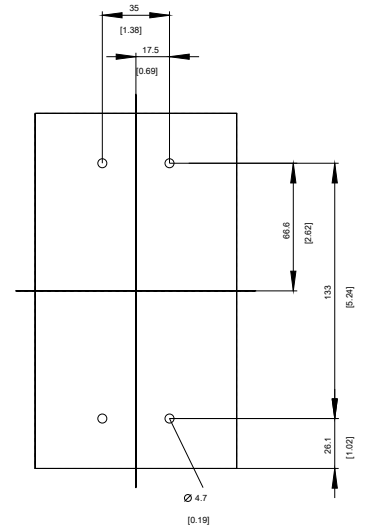
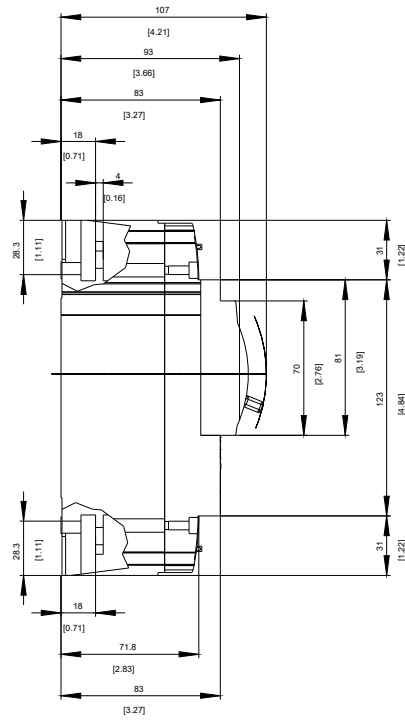
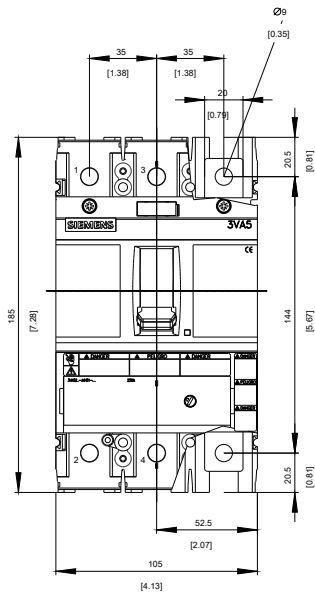
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5215-0MH31-0AA0

CAX-Online-Generator

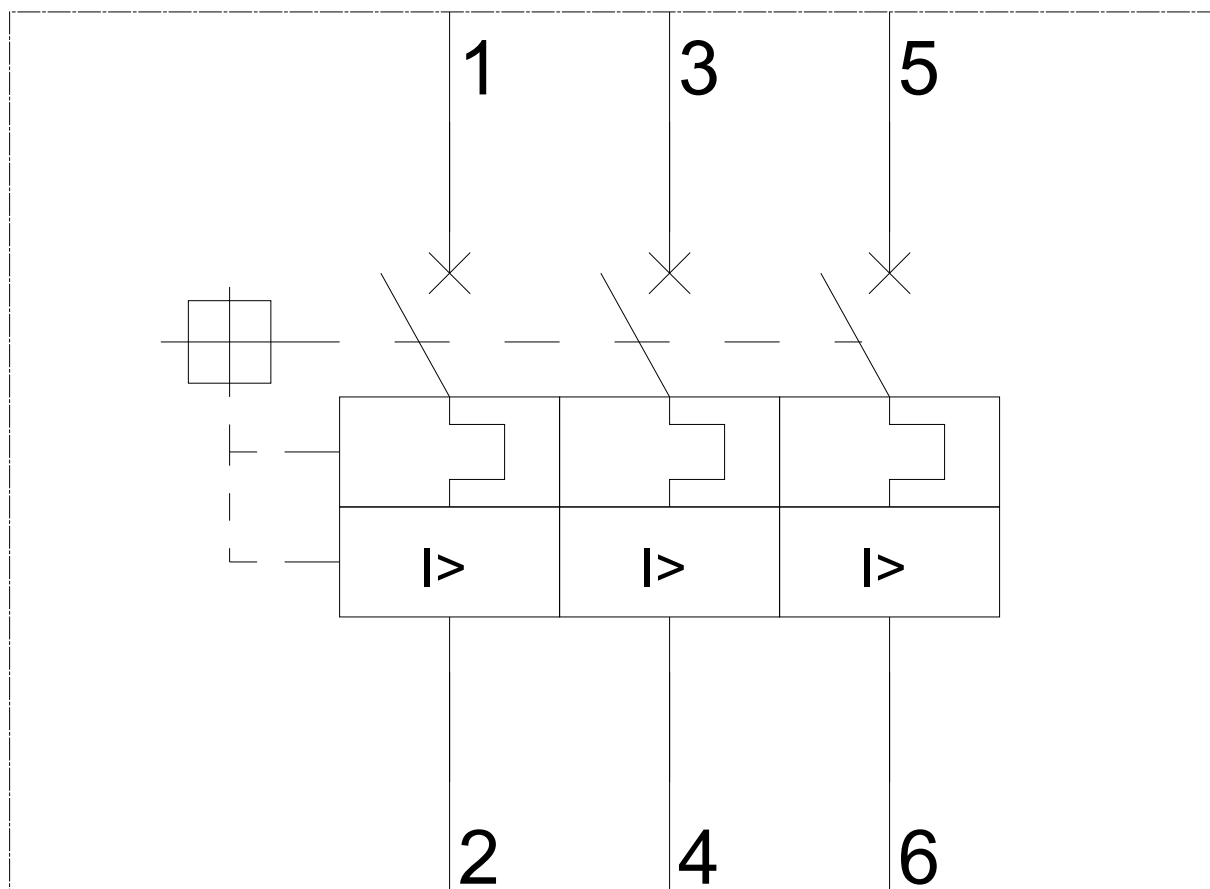
<http://www.siemens.com/cax>

Tender specifications

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

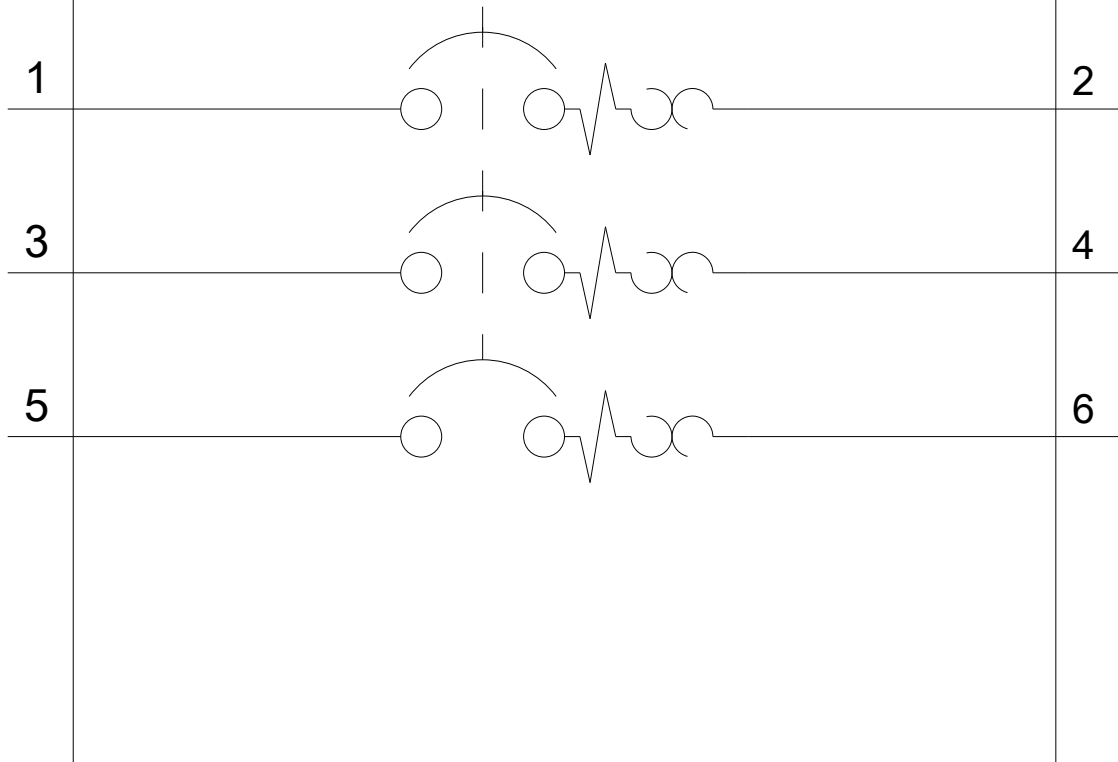


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