

circuit breaker 3VA1 IEC frame 250 breaking capacity class M
 $I_{cu}=55kA @ 415V$ 3-pole, starter protection TM120M, AM, $I_n=160A$
 without overload protection short-circuit protection $I_i=7...16 \times I_n$ nut
 keeper kit undervoltage release (UVR) 120-127V AC 50/60Hz



Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Product version	Starter protection
Design of the overcurrent release	TM120M
Protective function of the overcurrent release	I
Number of poles	3
Design of the auxiliary release	Undervoltage release (UVR)
Auxiliary contact version	2 auxiliary switches HQ
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	500 V
Operating power / at AC-3 / at 400 V	55 W
Latching - endurance	15 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000
Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Without

Product function	
<ul style="list-style-type: none"> • communication function • Phase failure detection • other measurement function 	No
Net weight	2.06 kg

Current

Max. rated operational current of the frame size	250 A
Rated continuous current I _u	160 A
Operating current	
<ul style="list-style-type: none"> • at 40 °C • at 45 °C • at 50 °C • at 55 °C • at 60 °C • at 65 °C • at 70 °C 	160 A 160 A 160 A 153.6 A 150.4 A 147.2 A 144 A

Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	M
Maximum short-circuit current breaking capacity (I _{cu})	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 690 V 	85 kA 55 kA 30 kA 10 kA
Operational short-circuit current breaking capacity (I _{cs})	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 690 V 	85 kA 55 kA 30 kA 5 kA
Short-circuit current making capacity (I _{cm})	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V 	187 kA 121 kA 17 kA

Adjustable parameters

Short-term delayed / tripping switchable / I _{2t} =ON/OFF	No
Adjustable response value current / I _{li} min.	1 120 A
Adjustable response value current / I _{li} max.	2 560 A

Mechanical Design

Height	158 mm
Width	105 mm

Depth	70 mm
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Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	lug terminal

Auxiliary circuit

Product component	
• undervoltage release	Yes
• Voltage trigger	No
• undervoltage release with leading contact	No
• Trip indicator	No
Number of CO contacts / for auxiliary contacts	2

Accessories

Product extension / optional / motor drive	Yes
Manufacturer's article number	
• of the integrated auxiliary switch/alarm switch	3VA9988-0AA12
• of the integrated auxiliary trip	3VA9608-0BB24

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 DIN EN 81346-2	Q
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General Product Approval	EMC	Declaration of Conformity
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[Miscellaneous](#)



Test Certificates	Shipping Approval	other
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[Miscellaneous](#)

[Special Test Certificate](#)



LRS

[Confirmation](#)

[Manufacturer Declaration](#)

[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?mfb=3VA1216-5MH32-0CC0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1216-5MH32-0CC0>

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

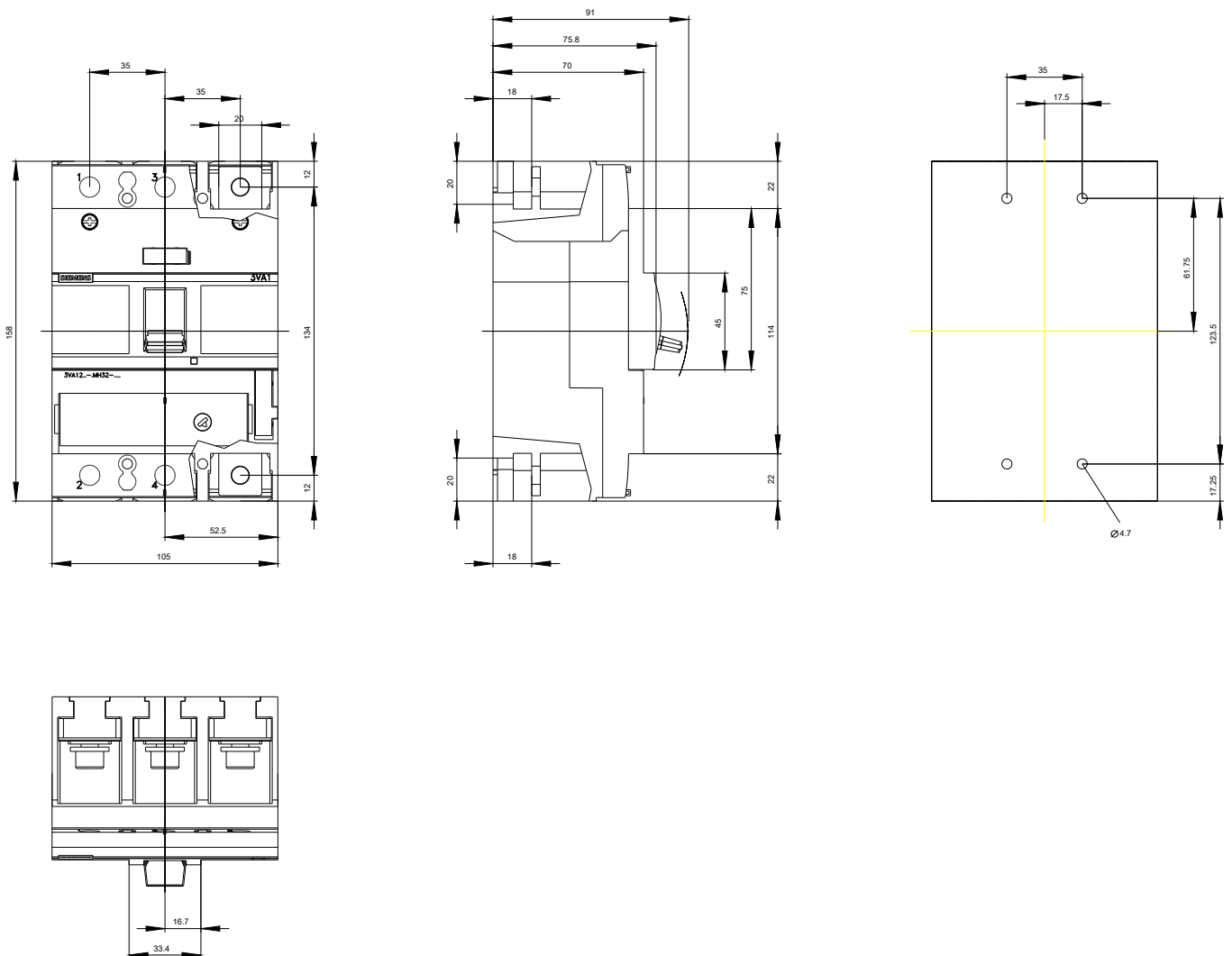
http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA1216-5MH32-0CC0

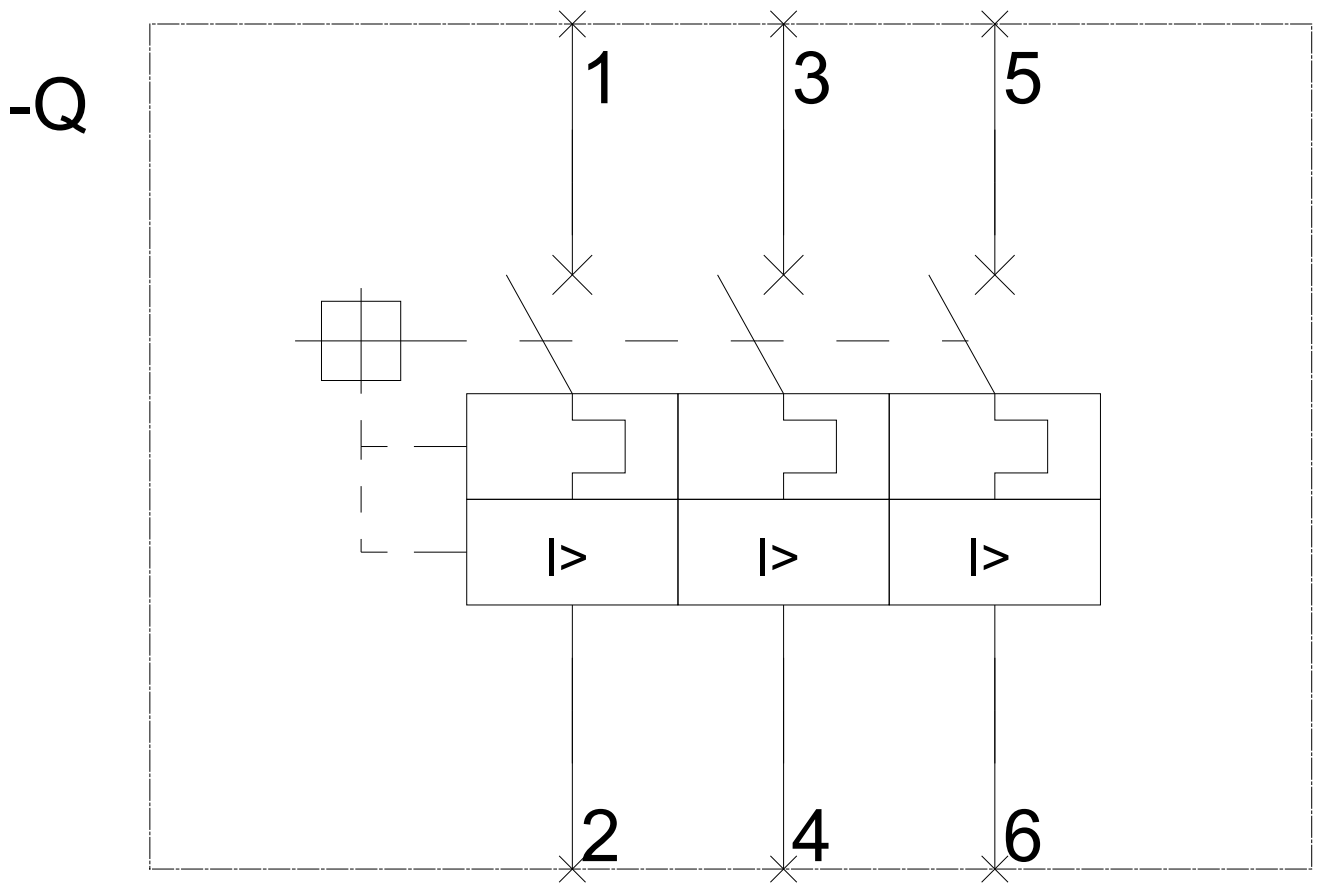
CAX-Online-Generator

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

Tender specifications

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





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