



CIRCUIT BREAKER 3VA1 IEC FRAME 250 BREAKING CAPACITY
CLASS M ICU=55KA @ 415 V 3-POLE, MOTOR STARTER PROT.
TM120M, AM, IN=160A WITHOUT OVERLOAD PROTECTION
SHORT CIRCUIT PROTECTION II=7...16 X IN BUSBAR
CONNECTION SHUNT TRIP (STL) 12-30 V DC, 24 V AC 50/60 HZ

Model	
product brandname	SENTRON
Product designation	Molded case circuit breaker
Design of the product	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)
Design of the auxiliary switch	2 auxiliary switches HQ

General technical data	
Tension assignée d'isolement Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 V
Max. rated operational voltage Ue with DC	500 V
Operating power / at AC-3 / at 400 V	55 W
Operating power / at AC-3 / at 230 V	0 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
Neutral conductors / upgradeable/retrofitable	No

Ground fault monitoring version	Without
Product function	
• communication function	No
• Phase failure detection	No
• other measurement function	No
Net weight	2.06 kg

Electricity

Max. rated operational voltage of the size of the circuit-breaker	250 A
Courant permanent assigné lu	160 A
Operating current	
• at 40 °C	160 A
• at 45 °C	160 A
• at 50 °C	160 A
• at 55 °C	153.6 A
• at 60 °C	150.4 A
• at 65 °C	147.2 A
• at 70 °C	144 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 440 V	30 kA
• at 690 V	10 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	30 kA
• at 690 V	5 kA
Short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 690 V	17 kA

Adjustable parameters

Adjustable response value current / Ig min.	0 A
Adjustable response value current / Ig min.	0 A
Adjustable response value current / Ig min.	0 A
Adjustable response value current / Ig min.	0 A
Adjustable response value current / li min.	0 A

Adjustable response value current / I _n max.	0 A
Mechanical Design	
Height	158 mm
Width	105 mm
Depth	70 mm
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 supplied basic switch	3VA1216-5MH32-0AA0
• of the integrated auxiliary switch/alarm switch	3VA9988-0AA12
• of the integrated auxiliary trip	3VA9608-0BB11
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	
Equipment marking / acc. to DIN EN 81346-2	Q

General Product Approval		EMC	Declaration of Conformity	Test Certificates
 CCC	 VDE	 EAC	 RCM	 EG-Konf.

[sonstig](#)

other	
Bestätigungen	sonstig

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA1216-5MH32-0BC0>

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

<http://support.automation.siemens.com/WW/view/en/3VA1216-5MH32-0BC0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1216-5MH32-0BC0

CAX-Online-Generator

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

Tender specifications

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





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