



CIRCUIT BREAKER 3VA1 IEC FRAME 250 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=200A OVERLOAD PROTECTION IR=140A ...200A SHORT CIRCUIT PROTECTION II=5...10 X IN NEUTRAL PROTECTION 1 BUSBAR CONNECTION SHUNT TRIP (STL) 220-250 V DC, 208-277 V AC 2 AUXILIARY SWITCH HQ 1 TRIP ALARM SWITCH HQ

Model	
product brandname	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Design of the overcurrent release	TM240
Protective function of the overcurrent release	LI
Number of poles	4
Design of the auxiliary release	without auxiliary release
Design of the auxiliary switch	2 auxiliary switches + 1 trip alarm switch 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	600 V
Operating power / at AC-3 / at 400 V	0 W
Operating power / at AC-3 / at 230 V	0 W
Active power loss / for rated value of the current / at AC / in hot operating state / per device	42 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	2.2 kg

Electricity

Max. rated operational voltage of the size of the circuit-breaker	250 A
Courant permanent assigné Iu	200 A
Operating current	
• at 40 °C	200 A
• at 45 °C	200 A
• at 50 °C	200 A
• at 55 °C	194 A
• at 60 °C	188 A
• at 65 °C	182 A
• at 70 °C	176 A

Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	S
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V	55 kA
• at 415 V	36 kA
• at 440 V	25 kA
• at 690 V	7 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	55 kA
• at 415 V	36 kA
• at 440 V	25 kA
• at 690 V	5 kA
Short-circuit current making capacity (Icm)	
• at 240 V	121 kA
• at 415 V	75.6 kA
• at 690 V	11.9 kA

Adjustable parameters

Adjustable response value current / I _g min.	0 A
Adjustable response value current / I _g min.	0 A

Adjustable response value current / I _g min.	0 A
Adjustable response value current / I _g min.	0 A
Adjustable response value current / I _i min.	0 A
Adjustable response value current / I _i max.	0 A
Design of the N-conductor protection	100%

Mechanical Design

Height	158 mm
Width	140 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
Type of connectable conductor cross-section, connection screw, width x thickness , min.	13 x 1
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8

Auxiliary circuit

Product component	
<ul style="list-style-type: none"> • undervoltage release • Voltage trigger • undervoltage release with leading contact • Trip indicator 	<p>No</p> <p>No</p> <p>No</p> <p>Yes</p>
Number of CO contacts / for auxiliary contacts	3

Accessories






Product extension / optional / motor drive	Yes
Manufacturer's article number	
<ul style="list-style-type: none"> • of the supplied basic switch • of the integrated auxiliary switch/alarm switch • of the integrated auxiliary switch/alarm switch 	<p>3VA1220-4GF42-0AA0</p> <p>3VA9988-0AA12</p> <p>3VA9988-0AB12</p>






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 	<p>-25 °C</p> <p>70 °C</p> <p>-40 °C</p> <p>80 °C</p>

Certificates

Equipment marking / acc. to DIN EN 81346-2	Q
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General Product Approval			EMC	Declaration of Conformity	Test Certificates
 CCC	 VDE		 RCM	 EG-Konf.	Typprüfbescheinigung/Werkszeugnis

Test Certificates	Shipping Approval				
sonstig	 ABS	 BUREAU VERITAS	 GL	 LRS	 RMRS

other
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/3VA1220-4GF42-0AH0>

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

<http://support.automation.siemens.com/WW/view/en/3VA1220-4GF42-0AH0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA1220-4GF42-0AH0

CAX-Online-Generator

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

Tender specifications

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

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