



circuit breaker 3VA1 IEC frame 250 breaking capacity class M Icu=55kA @ 415V 3-pole, line protection TM240, ATAM, In=200A overload protection Ir=140A...200A short-circuit protection Ii=5...10 x In nut keeper kit 1 auxiliary switch HQ 1 trip alarm switch HQ

Model	
product brand name	SETRON
product designation	Molded case circuit breaker
Product version	Line protection
design of the overcurrent release	TM240
protection function of the overcurrent release	LI
number of poles	3
design of the auxiliary release	without auxiliary release
Auxiliary contact version	1 auxiliary switch + 1 trip alarm switch HQ
General technical data	
rated insulation voltage Ui	800 V
Max. rated operational voltage Ue with DC	500 V
power loss [W] / maximum	42 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	14 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	5 400
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
Net Weight	1,7 kg
Current	
Max. rated operational current of the frame size	250 A
Courant permanent assigné lu	200 A
operational 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	M
breaking capacity maximum short-circuit current (Icu)	

<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	85 kA 55 kA 36 kA 15 kA 10 kA
breaking capacity operating short-circuit current (Ics) <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	85 kA 55 kA 36 kA 10 kA 5 kA
short-circuit current making capacity (Icm) <ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	187 kA 121 kA 75.6 kA 30 kA 17 kA
design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter

Adjustable parameters

Adjustable response value current / I _g min.	1
Adjustable response value current / I _g min.	1
Adjustable response value current / I _i min.	1 000 A
Adjustable response value current / I _i max.	2 000 A
Ground fault protection / tripping switchable / I _{2t} =ON/OFF	No

Mechanical Design

height [in]	6.22 in
Height	158 mm
width [in]	4.13 in
Width	105 mm
depth [in]	2.76 in
depth	70 mm

Connections

arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	nut keeper kit on both ends
Type of connectable conductor cross-section, connection screw, width x thickness , min.	13 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8 mm
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	Silver

Auxiliary circuit

product component <ul style="list-style-type: none"> • undervoltage release • voltage trigger • undervoltage release with leading contact • trip indicator 	No No No Yes
number of CO contacts / for auxiliary contacts	2

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 	3VA12205EF320AA0 3VA9988-0AA12 3VA9988-0AB12

Environmental conditions

protection class IP / on the front	IP40
ambient temperature <ul style="list-style-type: none"> • during operation / minimum • during operation / maximum 	-25 °C 70 °C

- during storage / minimum
- during storage / maximum

-40 °C
80 °C

Certificates

reference code / acc. to IEC 81346-2

Q

General Product Approval

EMC

Declaration of
Conformity



[Miscellaneous](#)



Declaration of
Conformity

Test Certificates

Marine / Shipping

[UK Declaration of
Conformity](#)

[Miscellaneous](#)

[Special Test Certific-
ate](#)

[Type Test Certific-
ates/Test Report](#)



Marine / Shipping

other



[Miscellaneous](#)

[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=3VA1220-5EF32-0AF0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1220-5EF32-0AF0>

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

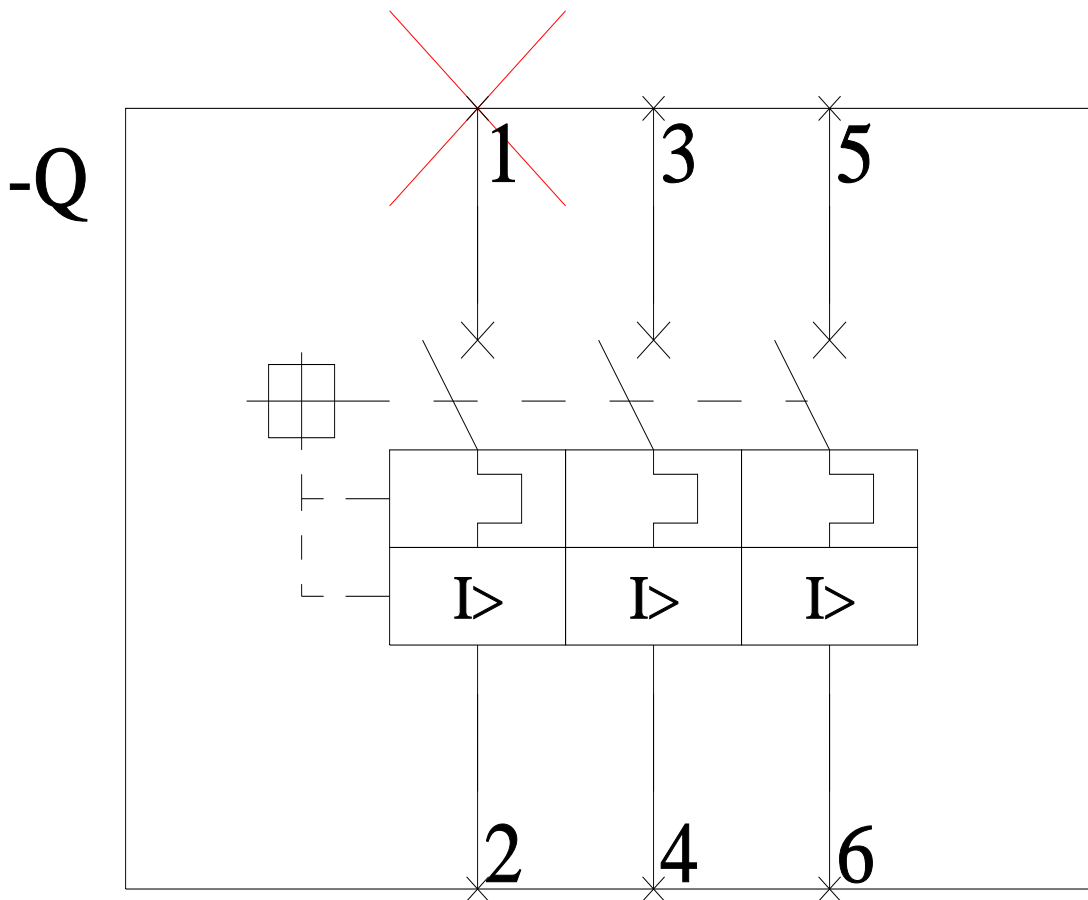
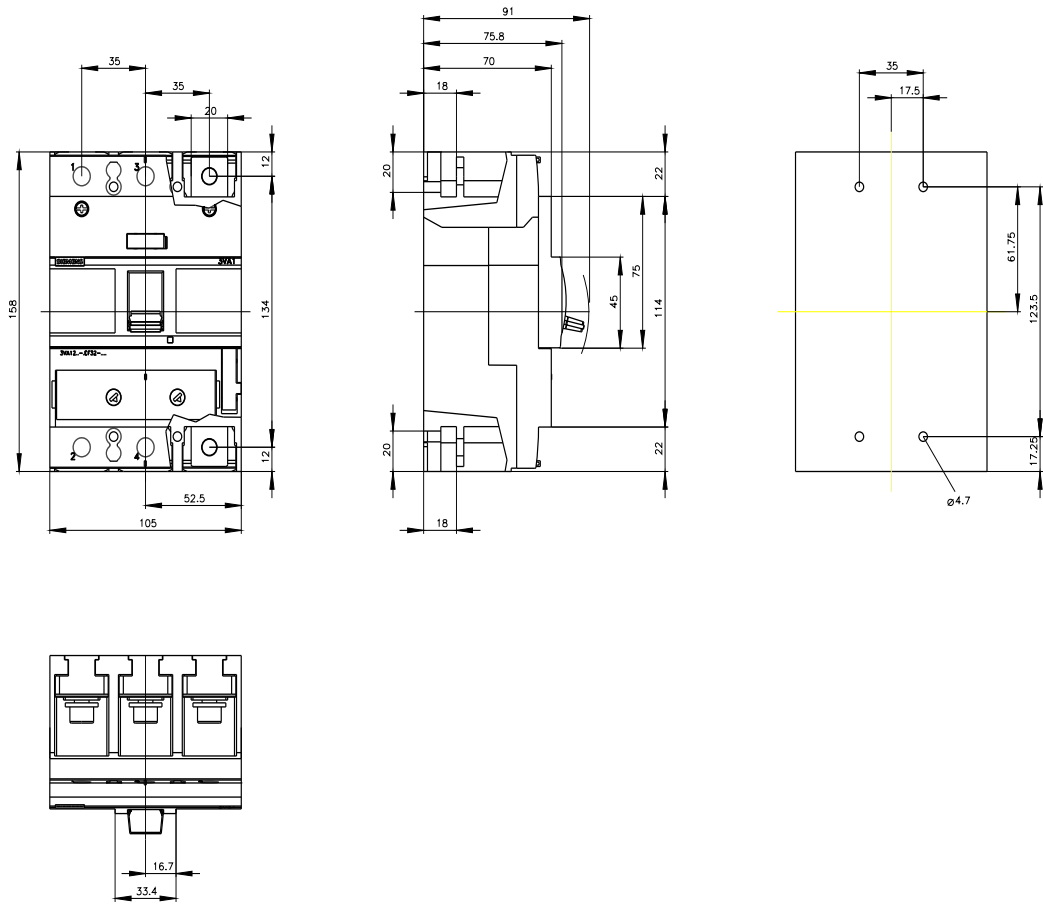
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1220-5EF32-0AF0

CAx-Online-Generator

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

Tender specifications

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



last modified:

10/3/2021

