## **SIEMENS**

## **Data sheet**



circuit breaker 3VA1 IEC frame 160 breaking capacity class S Icu=36kA @ 415V 4-pole, line protection TM240, ATAM, In=63A overload protection Ir=44A...63A short-circuit protection Ii=5...10 x In N conductor protection 100% nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	TM240
protection function of the overcurrent release	Ш
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	600 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	17.3 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	5.77 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	9 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	6 300
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
<ul> <li>communication function</li> </ul>	No
<ul> <li>other measurement function</li> </ul>	No
Net Weight	1.211 kg
Current	
operational current	
• at 40 °C	63 A
• at 45 °C	63 A
● at 50 °C	63 A
• at 55 °C	62 A
• at 60 °C	61 A
• at 65 °C	60 A
● at 70 °C	58 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 500 V	7 kA
● at 690 V	7 kA

operating short-circuit current breaking capacity (lcs)	
• at 240 V	55 kA
● at 415 V	36 kA
• at 440 V	25 kA
● at 500 V	5 kA
● at 690 V	5 kA
short-circuit current making capacity (Icm)	
• at 240 V	121 kA
• at 415 V	75.6 kA
• at 440 V	52.5 kA
● at 500 V	11.9 kA
• at 690 V	11.9 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	
product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (Ir) / of the L-trip / with	
I2t characteristic	
• minimum	44 A
• maximum	63 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
minimum	1s
maximum	1 s
adjustable response value setting current (li) / for I-tripping	
• minimum	315 A
• maximum	630 A
adjustable setting current (InN) / for N-tripping	
• minimum	63 A
• maximum	63 A
design of the N-conductor protection	100%
product function / grounding protection	No
Mechanical Design	
product component	
undervoltage release	No
voltage trigger	No
• trip indicator	No
height [in]	5.12 in
height	130 mm
width [in]	4 in
width	101.6 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-sections / for flat-bar terminal connection / minimum	12 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	17 x 6,5 mm
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) $$	Silver
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	Tin
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	Yes
Environmental conditions	
protection class IP / on the front	IP40
ambient temperature	
during operation / minimum	-25 °C

• during operation / maximum

• during storage / minimum

-40 °C • during storage / maximum 80 °C

reference code / according to IEC 81346-2

**General Product Approval** 



Confirmation



70 °C

Q

**Miscellaneous** 

**KC** 



EMC

**Declaration of Conformity** 

**Test Certificates** 







Type Test Certificates/Test Report

**Special Test Certific**ate

Miscellaneous

Marine / Shipping







CCS / China Classification Society

Confirmation

other

other

**Environment** 

**Miscellaneous** 

**Miscellaneous** 

**Environmental Con**firmations

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3VA1163-4GF42-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA1163-4GF42

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

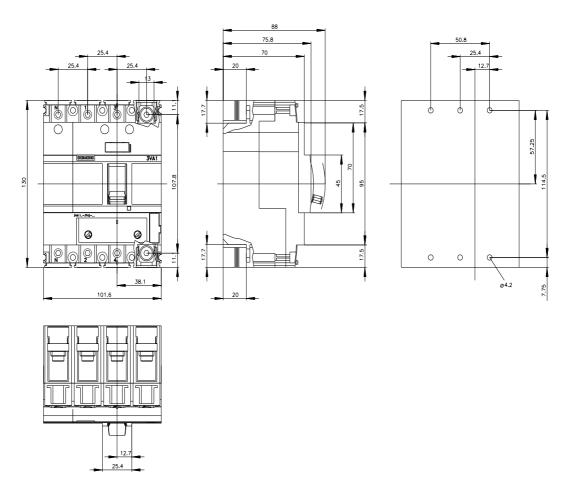
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA1163-4GF42-0AA0

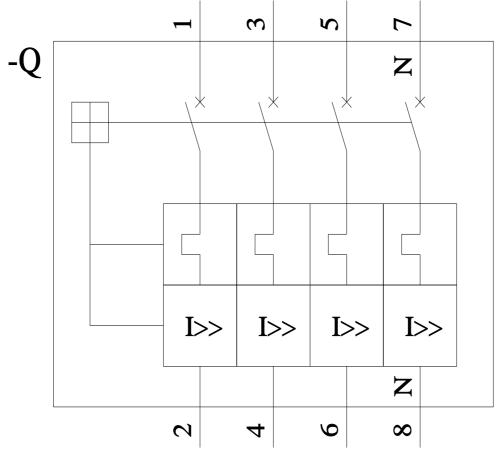
**CAx-Online-Generator** 

http://www.siemens.com/cax

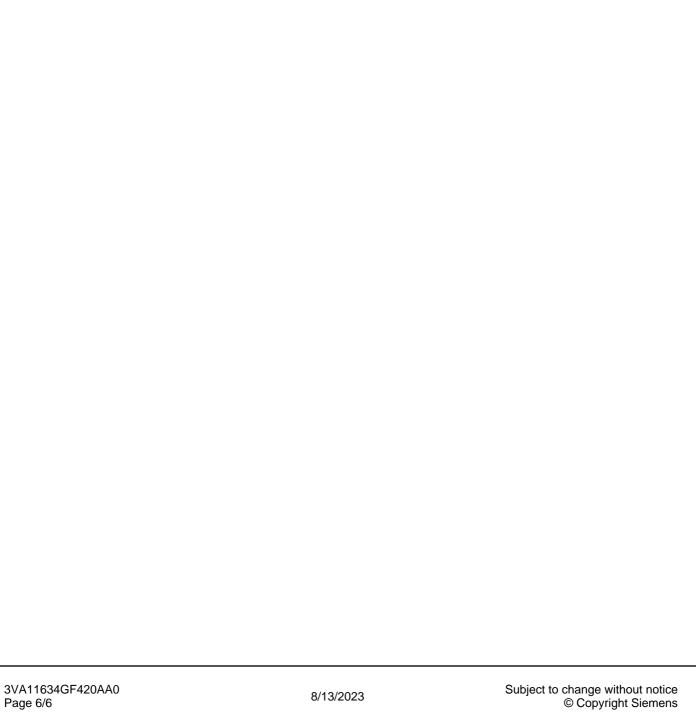
**Tender specifications** 

http://www.siemens.com/specifications





last modified: 8/10/2023 🖸



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