Data sheet 3VA5560-7GC42-2AA0

circuit breaker 3VA5 UL frame 800 breaking capacity class C 100kA @ 480 V 4-pole, line protection TM230, FTAM, In=600A overload protection Ir=600A fixed short circuit protection Ii=5...10 x In neutral protection 1 nut keeper kit on both sides

Model	31003
product designation / according to UL file	CMAS
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HID Type)	No
design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)	No
design of the overcurrent release	TM230
protection function of the overcurrent release	LI
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	1 000 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	162 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	54 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	5 100
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 500
electrical endurance (operating cycles) / at 480 V	5 100
electrical endurance (operating cycles) / at 600 V	3 500
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	No
product function	
 communication function 	No
other measurement function	No
Net Weight	16.323 kg
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	600 A
at 45 °C	583 A
● at 50 °C	566 A
● at 55 °C	549 A
• at 60 °C	532 A
● at 65 °C	515 A
● at 70 °C	497 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	C
maximum short-circuit current breaking capacity (Icu)	
● at 240 V	200 kA
• at 415 V	110 kA
● at 690 V	35 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V	150 kA
• at 415 V	85 kA
● at 690 V	19 kA
short-circuit current making capacity (Icm)	
● at 240 V	440 kA

# 415 Y	1445.	04014
design of short-circuit protection For ewthring power values in DC networks, see the 3VA molecied case circuit breaking capacity according to UL 489	• at 415 V	242 kA
breaker device manual; link to be found under Service & Support in the last chapter surrent breaking capacity en 2400 V 100 kA 14 800 V 100 kA 50 kA Adjustable parameters soljectable response value setting current (ir) / of the L-tray / with 121 chapter minimum emaximum emaximum 1 s adjustable response value setting current (in) / for L-tripping / with 121 chapter minimum emaximum 1 s adjustable response value setting current (in) / for I-tripping / with 121 chapter minimum emaximum 1 s adjustable response value setting current (in) / for I-tripping eminimum emaximum emaximum explores value setting current (in) / for N-tripping eminimum emaximum expect explorer explorer explorer emaximum emaximum explorer explorer emaximum emaximum emaximum explorer explorer		
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current breaking capacity • at 240 V		
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e at 480 V 50 kA Adjustable parameters adjustable parameters adjustable parameters adjustable parameters adjustable response value setting current (ir) / of the L-trip / with Zt characteristic e minimum 6000 A adjustable response value delay time (tr) / for L-tripping / with IZt characteristic e minimum 1 s	current breaking capacity	
### ### ##############################	• at 240 V	200 kA
Adjustable parameters adjustable response value setting current (ir) / of the L-trip / with (2t) characteristics • minimum	● at 480 V	100 kA
adjustable response value setting current (ir) / of the L-trip / with I2t characteristic — minimum — 600 A — 6	● at 600 V	50 kA
Izi characteristic minimum maximum maximum 1 s maximum 1 s maximum 1 s maximum 1 s adjustable response value delay time (tr) / for I-tripping / with 12t characteristic minimum maximum maximum maximum maximum maximum maximum maximum maximum maximum 600 A 600	Adjustable parameters	
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characteristic minimum 1 s s s s s s s s s	• maximum	600 A
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adjustable response value setting current (iii) / for I-tripping	• minimum	1 s
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maximum adjustable absolute value setting current (inN) / for N-tripping minimum maximum 600 A	adjustable response value setting current (li) / for I-tripping	
adjustable absolute value setting current (InN) / for N-tripping	• minimum	3 000 A
minimum 600 A maximum 600 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] 12.91 in height 328 mm width [in] 11.02 in width [in] 11.02 in width 280 mm depth 12.07 im depth 12.07 im width [in] 11.02 in width [in] 11.02 in width [in] 12.91 in height 280 mm depth 120 mm Connections arrangement of electrical connectors / for main current circuit 120 electrical connection / for flat-bar 120 electrical 120 electri	• maximum	6 000 A
emaximum 600 A design of the N-conductor protection 100% product function / grounding protection No Mochanical Dasign product component • undervoltage release • voltage trigger • inp indicator height [in] height 328 mm width [in] 11.02 in width 280 mm depth [in] 4.72 in depth 120 mm Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / finatimum design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts of the surface / of the connections product extension / optional / motor drive manufacturer's article number • of the supplied basic switch Environmental conditions protection class IP / on the front ambient temperature • during operation / maximum • during storage / minimum • during storage / maximum	adjustable absolute value setting current (InN) / for N-tripping	
design of the N-conductor protection 100% product function / grounding protection No Mechanical Design product component • undervoltage release No • voltage trigger No height [in] 12.91 in height 328 mm width [in] 11.02 in width 280 mm depth [in] 4.72 in depth 120 mm Connections arrangement of electrical connectors / for main current circuit ype of electrical connection / for main current circuit pype of electrical connection / for main current circuit terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the bottom of the switch (N. 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts of the supplied basic switch arrangement of electrical number • of the supplied basic switch Environmental connection / minimum design of the surface / of the connections / on the bottom of the switch (N. 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts of the supplied basic switch Environmental conditions protection class IP / on the front IP40 ambient temperature • during operation / maximum • during storage / minimum	• minimum	600 A
product function / grounding protection Mechanical Design product component	• maximum	600 A
Mechanical Design product component	design of the N-conductor protection	100%
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Connections	width	280 mm
Connections	depth [in]	4.72 in
arrangement of electrical connectors / for main current circuit 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 type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts product extension / optional / motor drive of the supplied basic switch Accessories protection class IP / on the front ambient temperature of during operation / minimum -25 °C of during operation / maximum -40 °C of trificates		120 mm
type of electrical connection / for main current circuit type of connectable conductor cross-sections / for flat-bar terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive of the supplied basic switch Environmental conditions protection class IP / on the front ambient temperature of during operation / minimum -25 °C of uring storage / minimum -40 °C certificates	Connections	
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terminal connection / minimum type of connectable conductor cross-sections / for flat-bar terminal connection / maximum design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts product extension / optional / motor drive manufacturer's article number of the supplied basic switch Available of the supplied basic switch Environmental conditions protection class IP / on the front ambient temperature during operation / minimum -25 °C during operation / maximum 70 °C during storage / minimum -40 °C certificates	type of electrical connection / for main current circuit	nut keeper kit on both ends
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts product extension / optional / motor drive manufacturer's article number of the supplied basic switch Environmental conditions protection class IP / on the front ambient temperature during operation / maximum during operation / maximum during storage / minimum during storage / maximum during storage / maximum during storage / maximum design of the surface / on the bottom of the silver silv		20 x 4 mm
switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive manufacturer's article number of the supplied basic switch Environmental conditions protection class IP / on the front ambient temperature of during operation / minimum during operation / maximum of uring storage / minimum of uring storage / maximum of cortificates		50 x 28 mm
number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive manufacturer's article number of the supplied basic switch Environmental conditions protection class IP / on the front ambient temperature oduring operation / minimum during operation / maximum oduring storage / minimum during storage / maximum eduring storage / maximum 80 °C Certificates	switch (N, 2, 4, 6)	silver
product extension / optional / motor drive manufacturer's article number of the supplied basic switch SVA55607GC422AA0 Environmental conditions protection class IP / on the front ambient temperature of during operation / minimum during operation / maximum of uning storage / minimum of uning storage / maximum	Auxiliary circuit	
product extension / optional / motor drive manufacturer's article number of the supplied basic switch SVA55607GC422AA0 Environmental conditions protection class IP / on the front ambient temperature of during operation / minimum during operation / maximum of characteristics during storage / minimum of characteristics Certificates	number of CO contacts / for auxiliary contacts	0
manufacturer's article number of the supplied basic switch Environmental conditions protection class IP / on the front ambient temperature of during operation / minimum during operation / maximum of uring storage / minimum of uring storage / maximum of uring storage / maximum certificates	Accessories	
of the supplied basic switch Environmental conditions protection class IP / on the front ambient temperature during operation / minimum during operation / maximum during storage / minimum during storage / maximum Certificates AVA55607GC422AA0 IP40 IP40 OC -25 °C - 0 °C	product extension / optional / motor drive	No
Environmental conditions protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum • Certificates	manufacturer's article number	
protection class IP / on the front ambient temperature • during operation / minimum • during operation / maximum 70 °C • during storage / minimum • during storage / maximum 80 °C Certificates		<u>3VA55607GC422AA0</u>
ambient temperature • during operation / minimum • during operation / maximum 70 °C • during storage / minimum • during storage / maximum 80 °C Certificates	Environmental conditions	
 during operation / minimum during operation / maximum C during storage / minimum during storage / maximum Certificates 	protection class IP / on the front	IP40
 during operation / maximum during storage / minimum during storage / maximum Certificates 	ambient temperature	
 during storage / minimum during storage / maximum Certificates 	 during operation / minimum 	-25 °C
during storage / maximum 80 °C Certificates	 during operation / maximum 	70 °C
Certificates	 during storage / minimum 	-40 °C
	 during storage / maximum 	80 °C
reference code / according to IEC 81346-2 Q	Certificates	
	reference code / according to IEC 81346-2	Q

Confirmation







Miscellaneous



Declaration of Conformity

Test Certificates

Marine / Shipping

other



Type Test Certificates/Test Report



Confirmation

Miscellaneous

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=3VA5560-7GC42-2AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5560-7GC42-2AA0

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

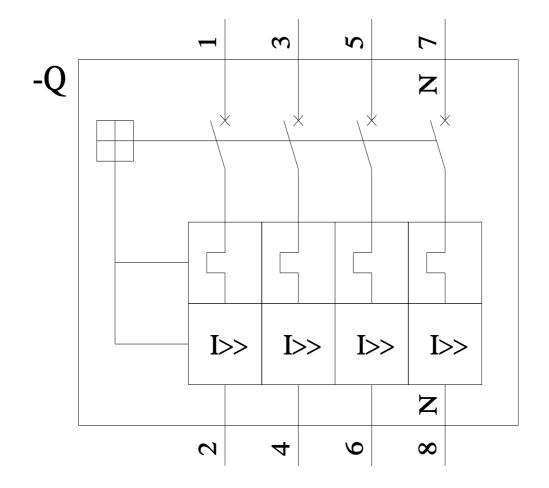
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5560-7GC42-2AA0

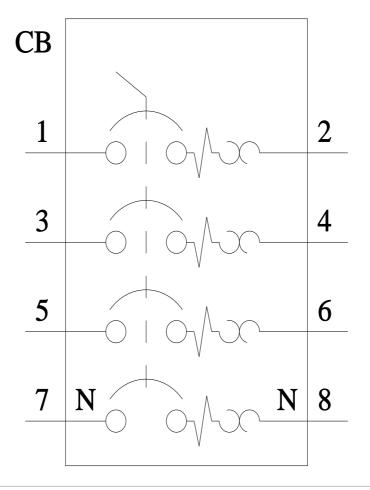
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications





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