

circuit breaker 3VA5 UL frame 800 breaking capacity class C 100kA @ 480 V 4-pole, line protection TM230, FTAM, In=700A overload protection Ir=700A fixed short circuit protection li=5...10 x In neutral protection 1 nut keeper kit on both sides

Model	
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	183 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	61 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 800
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 300
electrical endurance (operating cycles) / at 480 V	4 800
electrical endurance (operating cycles) / at 600 V	3 300
product feature / for neutral conductors / upgradable/retrofitable / 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	700 A
• at 45 °C	680 A
• at 50 °C	659 A
• at 55 °C	639 A
• at 60 °C	619 A
• at 65 °C	599 A
• at 70 °C	578 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

• at 415 V • at 690 V	242 kA 73.5 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
Switching capacity according to UL 489	
current breaking capacity • at 240 V • at 480 V • at 600 V	200 kA 100 kA 50 kA
Adjustable parameters	
adjustable response value setting current (I_r) / of the L-trip / with I2t characteristic • minimum • maximum	700 A 700 A
adjustable response value delay time (t_r) / for L-tripping / with I2t characteristic • minimum • maximum	1 s 1 s
adjustable response value setting current (I_l) / for I-tripping • minimum • maximum	3 500 A 7 000 A
adjustable absolute value setting current (I_{nN}) / for N-tripping • minimum • maximum	700 A 700 A
design of the N-conductor protection	100%
product function / grounding protection	No
Mechanical Design	
product component • undervoltage release • voltage trigger • trip indicator	No No 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	Front connection
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	20 x 4 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	50 x 28 mm
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	silver
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	No
manufacturer's article number • of the supplied basic switch	3VA55707GC422AA0
Environmental conditions	
protection class IP / on the front	IP40
ambient temperature • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum	-25 °C 70 °C -40 °C 80 °C
Certificates	
reference code / according to IEC 81346-2	Q

[Confirmation](#)[Miscellaneous](#)Declaration of Con-
formity

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=3VA5570-7GC42-2AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5570-7GC42-2AA0>

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

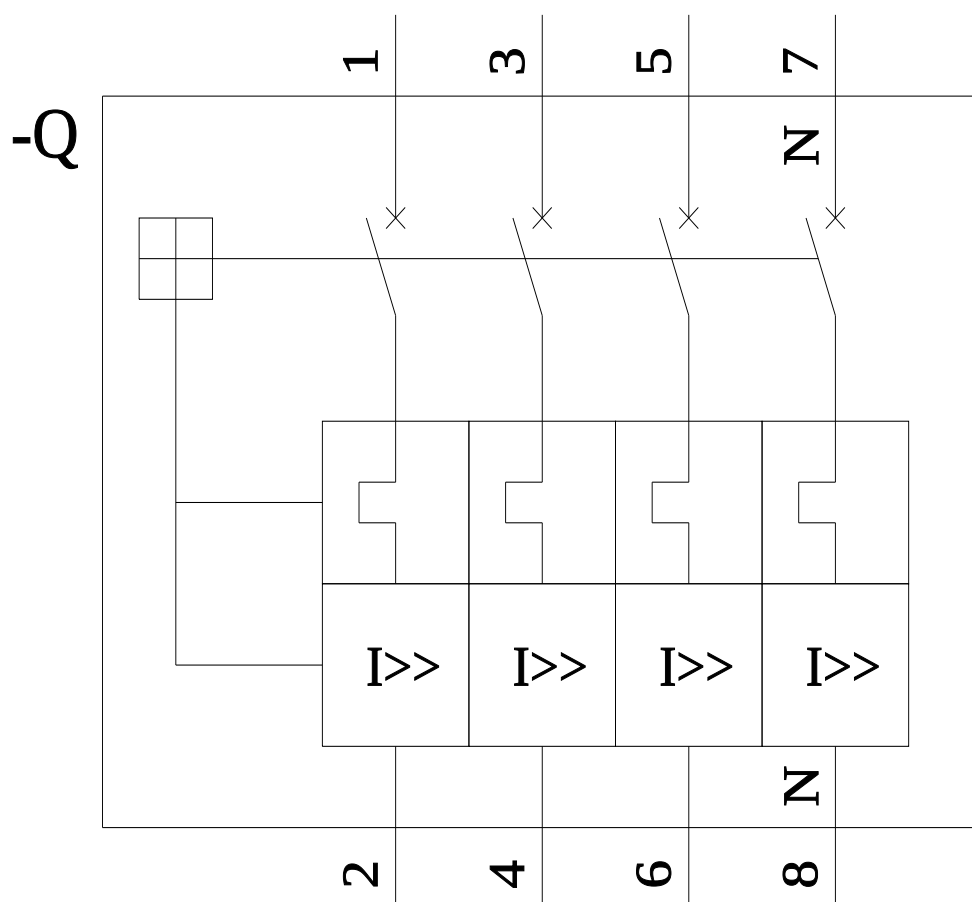
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5570-7GC42-2AA0

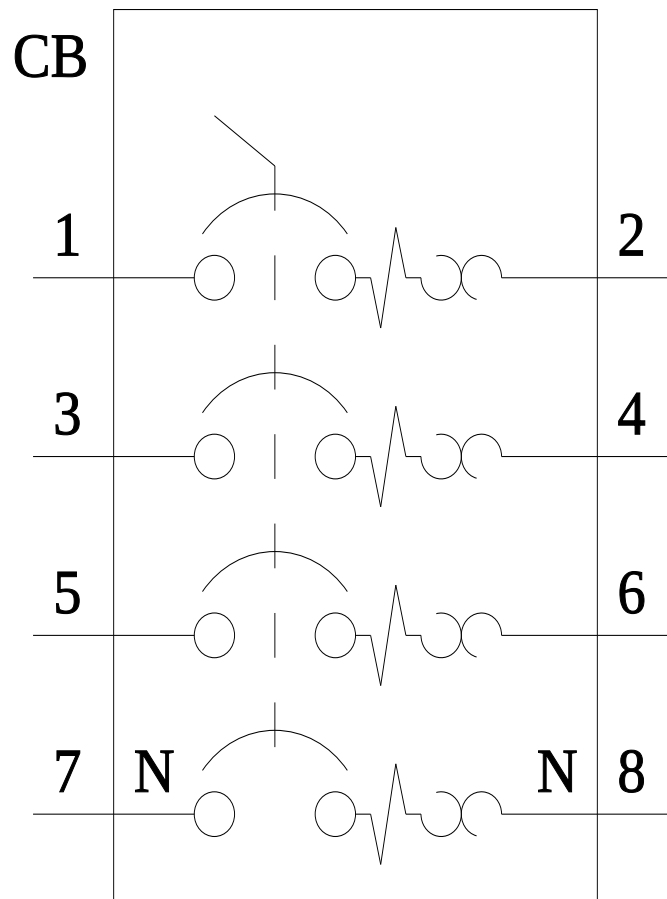
CAX-Online-Generator

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

Tender specifications

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





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