3VA5570-7GC46-2AA0

Data sheet



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 Ii=5...10 x In neutral protection 1 Al-lug, line and load side

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/retrofittable / short-circuit and overload proof	No
product function	
 communication function 	No
 other measurement function 	No
Net Weight	18.716 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	С
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 (lcs)	
• at 240 V	150 kA
• at 415 V	85 kA
• at 690 V	19 kA
short-circuit current making capacity (lcm)	
• at 240 V	440 kA
• at 415 V	242 kA
• at 690 V	73.5 kA
design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case circuit
doorgin or once to order protocolor	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	200 kA
● at 480 V	100 kA
• at 600 V	50 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
• minimum	700 A
• maximum	700 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1s
• maximum	1s
adjustable response value setting current (li) / for I-tripping	
• minimum	3 500 A
• maximum	7 000 A
adjustable absolute value setting current (InN) / for N-tripping	
minimum	700 A
maximum	700 A
design of the N-conductor protection	100%
product function / grounding protection	No
Mechanical Design	
product component	Na
undervoltage release	No
voltage trigger	No
• trip indicator	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	circular conductor terminal on both sides
design of the surface / of the connections / on the bottom of the	silver
switch (N, 2, 4, 6)	
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 	3VA55707GC462AA0
Environmental conditions	
protection class IP / on the front	IP40
ambient temperature	
during operation / minimum	-25 °C
3 -F	

• during operation / maximum

• during storage / minimum

70 °C -40 °C 80 °C

• during storage / maximum

Certificates

reference code / according to IEC 81346-2

Q

General Product Approval

Declaration of Conformity

Confirmation





Miscellaneous

EAC



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=3VA5570-7GC46-2AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5570-7GC46-2AA0

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

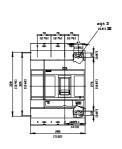
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5570-7GC46-2AA0

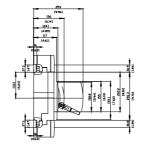
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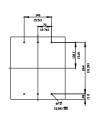
http://www.siemens.com/cax

Tender specifications

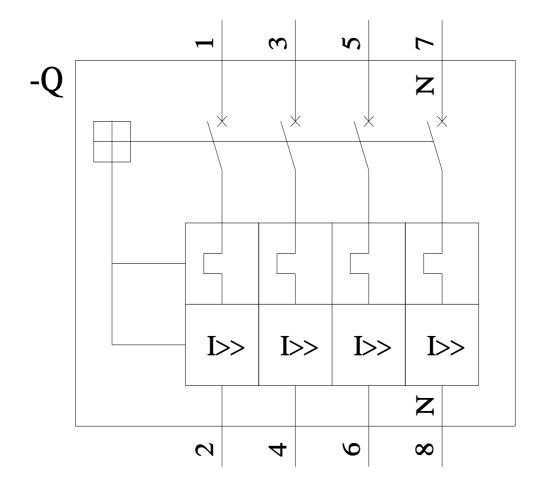
http://www.siemens.com/specifications

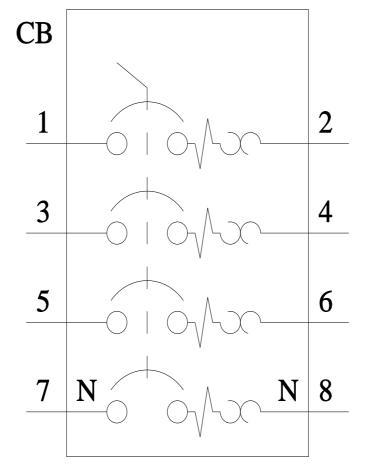












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