SIEMENS

Data sheet 3VA5570-7EC42-2AA0

	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 unprotected 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/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	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

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● 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 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	1 s
● maximum	1 s
adjustable response value setting current (Ii) / for I-tripping	
● minimum	3 500 A
● maximum	7 000 A
adjustable setting current (InN) / for N-tripping	
● minimum	0 A
● maximum	0 A
design of the N-conductor protection	Without
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	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	3VA55707EC422AA0
Environmental conditions	
protection class IP / on the front	IP40
ambient temperature	
● during operation / minimum	-25 °C
● during operation / maximum	70 °C
● during storage / minimum	-40 °C
● during storage / maximum	80 °C
reference code / according to IEC 81346-2	Q
Approvals / Certificates	

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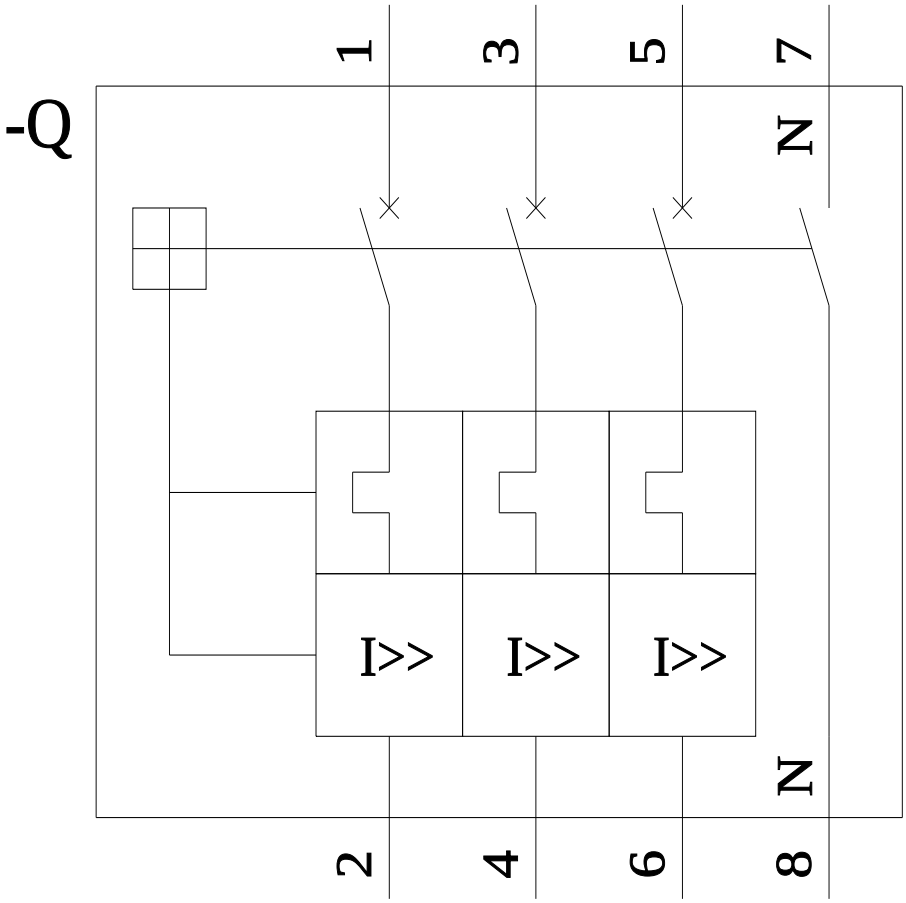
General Product Approval

Confirmation

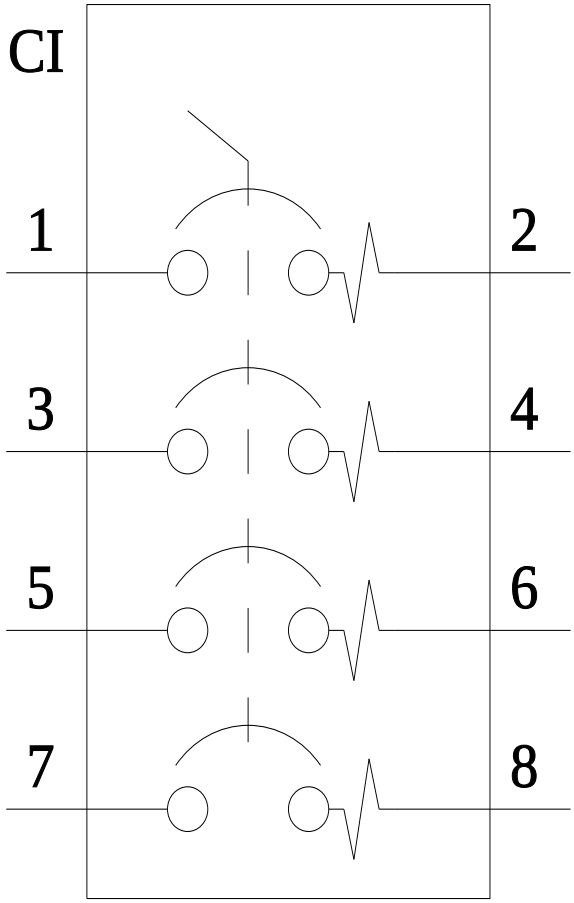
General Product Approval	Test Certificates	Marine / Shipping	other	
Miscellaneous	Type Test Certific-ates/Test Report		Confirmation	Miscellaneous

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=3VA5570-7EC42-2AA0
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3VA5570-7EC42-2AA0
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5570-7EC42-2AA0
CAx-Online-Generator
http://www.siemens.com/cax
Tender specifications
http://www.siemens.com/specifications



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last modified: 8/15/2023

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