SIEMENS

Data sheet

3VA5270-7EC36-1AA0



circuit breaker 3VA5 UL frame 250 breaking capacity class C 100kA @ 480 V 3-pole, line protection TM230, FTAM, In=70A overload protection Ir=70A fixed short-circuit protection Ii=5...10 x In UL489 SB load side

product branch name SENTRON product designation / according to UL file CFAM design of the product System protection design of the product in the coording to UL 489 / Hearing, Arr Conditioning, and Refrigeration dricult breaker (HACR Type) Yes design of the load switch / according to UL 489 / Hegh-intensity- Discharge circult breaker (HD Type) No design of the load switch / according to UL 489 / Hegh-intensity- incult breaker (WD Type) No design of the load switch / according to UL 489 / Hegh-intensity- Discharge circult breaker (HD Type) No design of the load switch / according to UL 489 / Hegh-intensity- incult breaker (WD Type) No design of the overcurrent release TM230 protection function of the overcurrent release U number of poles 680 V power loss [W] / maximum 17 W power loss [W] / maximum 17 W power loss [W] / maximum 17 W power loss [W] / for rated value of the current / at AC / in hot operating values / at AC / in at 800 V 8000 electrical endurance (operating cycles) / table AU 8000 electrical endurance (operating cycles) / at AO V 8000 electrital endurance (operating cycles) / at AO V	Model	
product designation / according to UL file CFAM design of the product System protection design of the load switch / according to UL 489 / High-Intensity Yes Discharge circuit breaker (HACR Type) No design of the load switch / according to UL 489 / High-Intensity No Discharge circuit breaker (HID Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (HID Type) No design of the overcurrent release TM230 protection function of the overcurrent release Ll number of poles 3 Ceneral technical data 690 V power loss [W] / for rated value 690 V power loss [W] / for rated value of the current / at AC / In hot operating state / per pole 57 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 8 000 electrical endurance (operating cycles) / typical 8 000 electrical endurance (operating cycles) / typical 8 000 ground-fault monitoring version without product feature / for neutral conductors / upgradable/retrofitable No othe	product brand name	SENTRON
design of the product System protection design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigerative (HACR Type) Yes design of the load switch / according to UL 489 / High-Intensity- Discharge oricul breaker (HIOT Type) No design of the load switch / according to UL 489 / High-Intensity- Discharge oricul breaker (HIOT Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (GWD Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (GWD Type) No design of the load switch / according to UL 489 / Network No operating voltage / at AC / rated value 690 V power loss [W] / maximum T7 W operating voltage / at AC / rated value 690 V power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 57 W mechanical service life (operating cycles) / Lypical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 ground-fault monitoring cycles) / at AC-1 / at 380/415 V 8 000 <	product designation	Molded-case circuit breaker
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 / High-Intensity- Discharge circuit breaker (HID Type) No design of the load switch / according to UL 489 / Switching Duty dricuit breaker (SWD Type) No design of the overcurrent release TM230 protection function of the overcurrent release LI number of poles 3 contral tochnical data 690 V operating voltage / at AC / rated value 690 V power loss [W] / for arited value of the current / at AC / in hot operating state / per pole 5.7 W electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 8000 electrical endurance (operating cycles) / at 480 V 8000 electrical endurance (operating cycles) / at 480 V 8000 electrical endurance (operating cycles) / at 480 V 8000 ground-fault monitoring version without product function No other measurement function No other measurement function No other measurement function No etalt0 °C 70 A etalt0	product designation / according to UL file	CFAM
Conditioning, and Refrigeration circuit breaker (HACR Type) No 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 operating voltage / at AC / rated value 690 V power loss [W] / maximum 17 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 5.7 W electrical endurance (operating cycles) / typical 8.000 electrical endurance (operating cycles) / ta AC-1 / at 380/415 V 8.000 electrical endurance (operating cycles) / at 480 V 8.000 electrical endurance (operating cycles) / at 480 V 8.000 electrical endurance (operating cycles) / at 480 V 8.000 electrical endurance (operating cycles) / at 480 V 8.000 electrical endurance (operating cycles) / at 480 V 8.000 electrical endurance (operating cycles) / at 480 V 8.000 electrical endurance (operating cycles) / at 480 V 8.000 ground-fault monitoring version without product feature / for noutclors / upgra	design of the product	System protection
Discharge circuit breaker (HID Type) No design of the load switch / according to UL 489 / Switching Duty No design of the overcurrent release TM230 protection function of the overcurrent release Ll number of poles 3 Ceneral tochnical data 690 V power loss [W] / for rated value of the current / at AC / in hot 57 W operating voltage / at AC / rated value of the current / at AC / in hot 57 W operating state / per pole 20 000 mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC0 V 8 000 electrical endurance (operating cycles) / at AC0 V 8 000 electrical endurance (operating cycles) / at A00 V 8 000 ground-fault monitoring version without rybrotic function No softer duration No other measurement function No • other measurement function No • other measurement function 70 A • at 45 °C		Yes
circuit breaker (SWD Type) TM230 design of the overcurrent release Ll number of poles 3 coperating voltage / at AC / rated value 690 V power loss [W] / maximum 17 W power loss [W] / maximum 17 W power loss [W] / maximum 5.7 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / ta AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / ta AE 0 V 4 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overtoad proof ground-fault monitoring version other measurement function No • other measurement 70 A • at 40 °C 70 A		No
protection function of the overcurrent release Ll number of poles 3 General technical data 690 V operating voltage / at AC / rated value 690 V power loss [W] / maximum 17 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 5.7 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof ground-fault monitoring version without product function 0 0 0 • other measurement function No 0 0 • other measurement function No 0 0 • at 40 °C 70 A 70 A 0 0 • at 45 °C 70 A <		No
number of poles 3 General tochnical data 690 V power loss [W] / maximum 17 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 5.7 W mechanical service life (operating cycles) / tt AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 380 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 680 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 680 V 4 000 electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 400 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof No ground-Fault monitoring version without product function No • other measurement function No • other measurement function No • other measurement function No • at 40 °C 70 A • at 45 °C 70 A • at 45 °C 70 A • at 55 °C 64.4 A	design of the overcurrent release	TM230
General technical data operating voltage / at AC / rated value 690 V power loss [W] / maximum 17 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 5.7 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at 600 V 4 000 electrical endurance (operating cycles) / at 600 V 4 000 ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.03 kg Current 70 A • at 40 °C 70 A • at 45 °C 70 A • at 55 °C 66.5 A • at 60 °C 66.5 A • at 65 °C 64.4 A	protection function of the overcurrent release	LI
operating voltage / at AC / rated value 690 V power loss [W] / maximum 17 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 5.7 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-0 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof No ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.308 kg Current rat 40 °C • at 40 °C 70 A • at 45 °C 70 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 60 °C 64.4 A	number of poles	3
jower loss [W] / maximum 17 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 5.7 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC0 V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof No ground-fault monitoring version without product function No • other measurement function No Net Weight 2.308 kg Current rol A • at 40 °C 70 A • at 40 °C 70 A • at 40 °C 70 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 60 °C 64.4 A	General technical data	
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operating state / per polemechanical service life (operating cycles) / typical20 000electrical endurance (operating cycles) / at AC-1 / at 380/415 V8 000electrical endurance (operating cycles) / at 690 V4 000electrical endurance (operating cycles) / at 600 V8 000electrical endurance (operating cycles) / at 800 V8 000electrical endurance (operating cycles) / at 800 V4 000product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proofNoground-fault monitoring versionwithoutproduct functionNo• communication functionNo• other measurement functionNoNet Weight2.308 kgCurrentmarking / according to UL 489 / 100%-rated breakeroperational current70 A• at 40 °C70 A• at 45 °C70 A• at 55 °C67.9 A• at 60 °C66.5 A• at 65 °C64.4 A	power loss [W] / maximum	17 W
electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC V 8 000 electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.308 kg Current at 40 °C 70 A • at 40 °C 70 A • at 40 °C 70 A • at 50 °C 67.9 A • at 50 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A		5.7 W
electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof No ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.308 kg Current marking / according to UL 489 / 100%-rated breaker operational current 70 A • at 40 °C 70 A • at 55 °C 67.9 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A	mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No • other measurement function No vertext 2.308 kg Current Image: Communication function marking / according to UL 489 / 100%-rated breaker No operational current 70 A • at 40 °C 70 A • at 50 °C 67.9 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A	electrical endurance (operating cycles) / at AC-1 / at 380/415 V	8 000
electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.308 kg Current No marking / according to UL 489 / 100%-rated breaker No operational current 70 A • at 40 °C 70 A • at 45 °C 70 A • at 55 °C 67.9 A • at 66 °C 66.5 A • at 65 °C 64.4 A	electrical endurance (operating cycles) / at AC-1 / at 690 V	4 000
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof No ground-fault monitoring version without product function other measurement function • communication function No • other measurement function No Net Weight 2.308 kg Current marking / according to UL 489 / 100%-rated breaker No • at 40 °C 70 A • at 45 °C 70 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A	electrical endurance (operating cycles) / at 480 V	8 000
/ short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.308 kg Current No marking / according to UL 489 / 100%-rated breaker No operational current 70 A • at 40 °C 70 A • at 50 °C 70 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A	electrical endurance (operating cycles) / at 600 V	4 000
product function No • communication function No • other measurement function No Net Weight 2.308 kg Current Marking / according to UL 489 / 100%-rated breaker marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C • at 40 °C 70 A • at 50 °C 70 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A		No
• communication functionNo• other measurement functionNoNet Weight2.308 kgCurrentCurrentmarking / according to UL 489 / 100%-rated breakerNooperational current70 A• at 40 °C70 A• at 55 °C70 A• at 55 °C67.9 A• at 60 °C66.5 A• at 65 °C64.4 A	ground-fault monitoring version	without
• other measurement functionNoNet Weight2.308 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational current• at 40 °C70 A• at 45 °C70 A• at 55 °C70 A• at 55 °C67.9 A• at 60 °C66.5 A• at 65 °C64.4 A	product function	
Net Weight2.308 kgCurrentNomarking / according to UL 489 / 100%-rated breakerNooperational current70 A• at 40 °C70 A• at 45 °C70 A• at 55 °C70 A• at 55 °C67.9 A• at 60 °C66.5 A• at 65 °C64.4 A	 communication function 	No
Current No marking / according to UL 489 / 100%-rated breaker No operational current 70 A • at 40 °C 70 A • at 45 °C 70 A • at 50 °C 70 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A	 other measurement function 	No
marking / according to UL 489 / 100%-rated breakerNooperational current-• at 40 °C70 A• at 45 °C70 A• at 50 °C70 A• at 55 °C67.9 A• at 60 °C66.5 A• at 65 °C64.4 A	Net Weight	2.308 kg
operational current 70 A • at 40 °C 70 A • at 45 °C 70 A • at 55 °C 70 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A	Current	
• at 40 °C 70 A • at 45 °C 70 A • at 50 °C 70 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A	marking / according to UL 489 / 100%-rated breaker	No
• at 45 °C 70 A • at 50 °C 70 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A	operational current	
• at 50 °C 70 A • at 55 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A	• at 40 °C	70 A
• at 55 °C 67.9 A • at 60 °C 66.5 A • at 65 °C 64.4 A	● at 45 °C	70 A
• at 60 °C 66.5 A • at 65 °C 64.4 A	● at 50 °C	70 A
• at 65 °C 64.4 A	● at 55 °C	67.9 A
	● at 60 °C	66.5 A
• at 70 °C 61.6 A	● at 65 °C	64.4 A
	● at 70 °C	61.6 A

Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	С
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	35 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with	
I2t characteristic	
• minimum	70 A
• maximum	70 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1 s
• maximum	1s
adjustable response value setting current (li) / for I-tripping	
• minimum	350 A
• maximum	700 A
adjustable setting current (InN) / for N-tripping	
• minimum	
maximum adjustable current response value current / of the current- dependent overload release	0 A 70 70 A
product function / grounding protection	No
Mechanical Design	
product component	
undervoltage release	No
voltage trigger	No
trip indicator	No
height [in]	7.28 in
height	185 mm
width [in]	4.13 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (6 AWG - 350 kcmil)
width	105 mm
depth [in]	3.27 in
depth	83 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
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 	70 °C
during storage / minimum	-40 °C
during storage / maximum	80 °C
Certificates	
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes
General Product Approval	



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)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5270-7EC36-1AA0}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5270-7EC36-1AA0

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

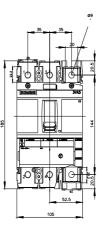
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5270-7EC36-1AA0

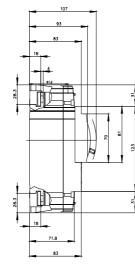
CAx-Online-Generator

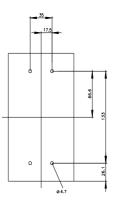
http://www.siemens.com/cax

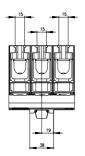
Tender specifications

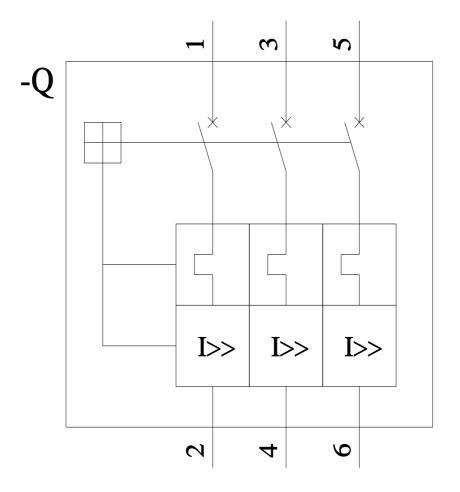
http://www.siemens.com/specifications

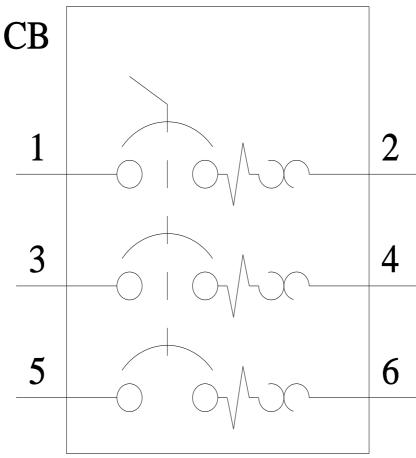












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