3VA5270-7ED32-1AA0

## **Data sheet**



circuit breaker 3VA5 UL frame 250 breaking capacity class C 100kA @ 480 V 3-pole, line protection TM210, FTFM, In=70A overload protection Ir=70A fixed short-circuit protection Ii=10 x In UL489 SB (naval), 50 load side

product brand name product designation product designation / according to UL file design of the product design of the product design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HD Type) design of the load switch / according to UL 489 / Switching Duty design of the load switch / according to UL 489 / Switching Duty design of the load switch / according to UL 489 / Switching Duty design of the load switch / according to UL 489 / Switching Duty design of the overcurrent release TM210 protection function of the overcurrent release LL number of poles  General technical data operating voltage / at AC / rated value power loss [W] / for rated value (House) power loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / at AC-1 / at 380 V 4 power loss [W] / for rated value of the current / at 80 V 5 power loss [W] / for rated value of the current / at 80 V 6 delectrical endurance (operating cycles) / at AC-1 / at 380 V 4 delectrical endurance (operating cycles) / at AC-1 / at 680 V 4 delectrical endurance (operating cycles) / at AC-1 / at 680 V 4 delectrical endurance (operating cycles) / at AC-1 / at 680 V 4 delectrical endurance (operating cycles) / at 600 V 9 delectrical endurance (operating cycles) / at 600 V 9 delectrical endurance (operating cycles) / at 600 V 9 delectrical endurance (operating cycles) / at 600 V 9 delectrical endurance (operating cycles) / at 600 V 9 delectrical endurance (operating cycles) / at 600 V 9 delectrical endurance (operating cycles) / at 600 V 9 delectrical endurance (operating cycles) / at 600 V 9 delectrical endurance (operating cycles) / at 600 V 9 delectrical endurance (operating cycles) / at 600 V 9 design of the current operation of the current ope	Model	
product designation / according to UL file	product brand name	SENTRON
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)  design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (BVD Type)  design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (SWD Type)  design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)  design of the overcurrent release  TM210  protection function of the overcurrent release  LI number of poles  3  Ceneral technical data  operating voltage / at AC / rated value  operating voltage / at AC / rated value  opower loss [W] / maximum  17 W  opower loss [W] / for rated value of the current / at AC / in hot operating state / per pole  mechanical service life (operating cycles) / typical  electrical endurance (operating cycles) / at AC-1 / at 380/415 V  electrical endurance (operating cycles) / at AC-1 / at 690 V  product feature / for neutral conductors / upgradable/retrofittable / short-oricuit and overload proof  ground-fault monitoring version  vithout  volunt function  • communication function  • communication function  • communication function  volunt reaction of the communication function  volunt	product designation	Molded-case circuit breaker
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circul breaker (HACR Type) design of the load switch / according to UL 489 / High-Intensity-Discharge circuit breaker (HID Type) design of the load switch / according to UL 489 / High-Intensity-Discharge circuit breaker (FID Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the overcurrent release TM210 protection function of the overcurrent release LI number of poles 3  Ceneral technical data operating voltage / at AC / rated value power loss [W] / maximum 17 W power loss [W] / for rated value of the current / at AC / in hot operating state! / per pole mechanical service life (operating cycles) / typical electrical endurance (operating cycles) / at AC-1 / at 380415 V electrical endurance (operating cycles) / at 480 V el	product designation / according to UL file	CFAM
Conditioning, and Refrigeration circuit breaker (HACR Type) design of the load switch / according to UL 489 / High-Intensity- bischarage circuit breaker (HHD Type)  design of the load switch / according to UL 489 / High-Intensity- circuit breaker (SWD Type)  design of the overcurrent release protection function of the overcurrent release LL number of poles  Ceneral technical data operating voltage / at AC / rated value opwer loss [W] / maximum 17 W opwer loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / typical electrical endurance (operating cycles) / at AC-1 / at 380/415 V electrical endurance (operating cycles) / at AC-1 / at 380/415 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-0 V electrical endurance (operating cycles) / at AC-1 V electrical endurance (operating cy	design of the product	System protection
Discharge circuit breaker (HID Type) design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) design of the overcurrent release TM210 protection function of the overcurrent release I III number of poles 3  General technical data operating voltage / at AC / rated value opower loss [W] / maximum power loss [W] / for rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / typical electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at ABO V product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function • communication function • communication function No Net Weight  marking / according to UL 489 / 100%-rated breaker operational current • at 40 °C • at 45 °C • at 50 °C • at 65 °C		Yes
design of the overcurrent release protection function of the overcurrent release LI number of poles 3  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 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-1 / at 690 V 4 000 electrical endurance (operating cycles) / at 480 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function No other measurement function No other measurement function No other measurement function No operational current 2.252 kg  Curront marking / according to UL 489 / 100%-rated breaker No operational current 0 at 40 °C 70 A 1455 °C 70 A 1		No
Description of the overcurrent release		No
number of poles   3	design of the overcurrent release	TM210
Operating voltage / at AC / rated value   690 V	protection function of the overcurrent release	LI
Operating voltage / at AC / rated value   690 V	number of poles	3
Dower loss [W] / maximum	General technical data	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  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 480 V 8 000 electrical endurance (operating cycles) / at 480 V 4 000 product leature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function No other measurement function No Net Weight 2.252 kg  Current  marking / according to UL 489 / 100%-rated breaker No operational current  at 40 °C 70 A at 50 °C 70 A at 50 °C 67.9 A at 60 °C at 65 °C 64.4 A	operating voltage / at AC / rated value	690 V
operating state / per pole mechanical service life (operating cycles) / typical 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 480 V 8 000 electrical endurance (operating cycles) / at 690 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version without product function No	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 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 ground-fault monitoring version without product function		5.7 W
electrical endurance (operating cycles) / at AC-1 / at 690 V electrical endurance (operating cycles) / at 480 V electrical endurance (operating cycles) / at 600 V electrical endurance (operating cycles) / at 600 V product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version  • communication function • other measurement function No Net Weight  Current  marking / according to UL 489 / 100%-rated breaker operational current • at 40 °C • at 45 °C • at 55 °C • at 60 °C • at 65 °C • at 65 °C • at 65 °C  • at 65 °C  • at 65 °C   4 000  No	mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at 480 V electrical endurance (operating cycles) / at 600 V  product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof ground-fault monitoring version  product function  • communication function  • other measurement function  No  Net Weight  Current  marking / according to UL 489 / 100%-rated breaker  • at 40 °C  • at 45 °C  • at 55 °C  • at 65 °C	electrical endurance (operating cycles) / at AC-1 / at 380/415 V	8 000
electrical endurance (operating cycles) / at 600 V  product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof  ground-fault monitoring version  without  product function  communication function  other measurement function  No  Net Weight  Current  marking / according to UL 489 / 100%-rated breaker  operational current  at 40 °C  at 45 °C  at 45 °C  at 55 °C  at 60 °C  at 60 °C  at 65 °C  of 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  ground-fault monitoring version without  product function  • communication function No  • other measurement function No  Net Weight 2.252 kg  Current  marking / according to UL 489 / 100%-rated breaker No  operational 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	electrical endurance (operating cycles) / at 480 V	8 000
// short-circuit and overload proof ground-fault monitoring version without  product function	electrical endurance (operating cycles) / at 600 V	4 000
product function		No
<ul> <li>● communication function</li> <li>No</li> <li>Noter measurement function</li> <li>No</li> <li>Net Weight</li> <li>2.252 kg</li> <li>Current</li> <li>marking / according to UL 489 / 100%-rated breaker</li> <li>No</li> <li>operational current</li> <li>at 40 °C</li> <li>at 45 °C</li> <li>at 45 °C</li> <li>70 A</li> <li>at 50 °C</li> <li>at 55 °C</li> <li>at 60 °C</li> <li>at 60 °C</li> <li>at 60 °C</li> <li>66.5 A</li> <li>at 65 °C</li> <li>64.4 A</li> </ul>	ground-fault monitoring version	without
● other measurement function  No  Net Weight  2.252 kg  Current  marking / according to UL 489 / 100%-rated breaker  operational current  ● at 40 °C  ● at 45 °C  ● at 50 °C  ● at 55 °C  ● at 60 °C  ● at 65 °C  ● 66.5 A  ● 41 65 °C   No  2.252 kg  No  0  0  0  0  0  0  0  0  0  0  0  0  0	product function	
Net Weight         2.252 kg           Current           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	• communication function	No
Current           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	<ul> <li>other measurement function</li> </ul>	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	Net Weight	2.252 kg
operational current  • at 40 °C  • at 45 °C  • at 50 °C  • at 55 °C  • at 60 °C  • at 65 °C  • 64.4 A	Current	
<ul> <li>at 40 °C</li> <li>at 45 °C</li> <li>at 50 °C</li> <li>at 55 °C</li> <li>at 60 °C</li> <li>at 60 °C</li> <li>at 65 °C</li> <li>64.4 A</li> </ul>	marking / according to UL 489 / 100%-rated breaker	No
<ul> <li>at 45 °C</li> <li>at 50 °C</li> <li>at 55 °C</li> <li>at 60 °C</li> <li>at 65 °C</li> <li>64.4 A</li> </ul>	operational current	
<ul> <li>at 50 °C</li> <li>at 55 °C</li> <li>at 60 °C</li> <li>at 60 °C</li> <li>at 65 °C</li> <li>64.4 A</li> </ul>	• at 40 °C	70 A
<ul> <li>at 55 °C</li> <li>at 60 °C</li> <li>at 65 °C</li> <li>64.4 A</li> </ul>	• at 45 °C	70 A
• at 60 °C     • 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 according to 120 30347 switching capacity class of the circuit breaker	C
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	1 s
adjustable response value setting current (li) / for I-tripping	
• minimum	700 A
maximum	700 A
adjustable setting current (InN) / for N-tripping	
• minimum	0 A
• maximum	0 A
adjustable current response value current / of the current- dependent overload release	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
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	nut keeper kit on both ends
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	13 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	25 x 8 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	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	Yes
vessels) / supplement SB	
General Product Approval	











EMC

**Declaration of Conformity** 

Marine / Shipping

other









**Miscellaneous** 

Confirmation

## 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)

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5270-7ED32-1AA0

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

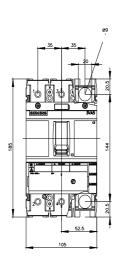
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA5270-7ED32-1AA0

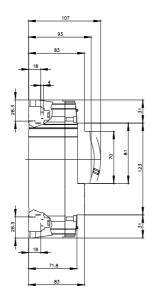
CAx-Online-Generator

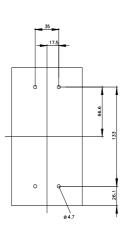
http://www.siemens.com/cax

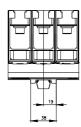
**Tender specifications** 

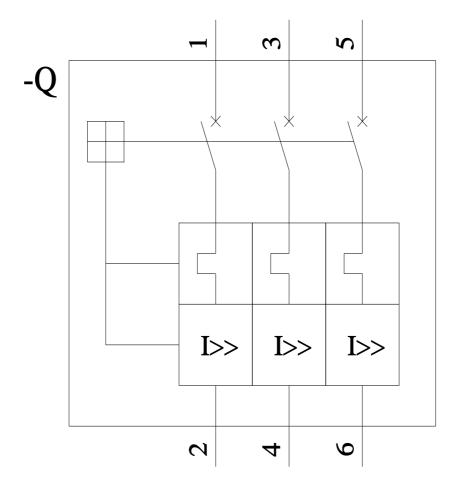
http://www.siemens.com/specifications

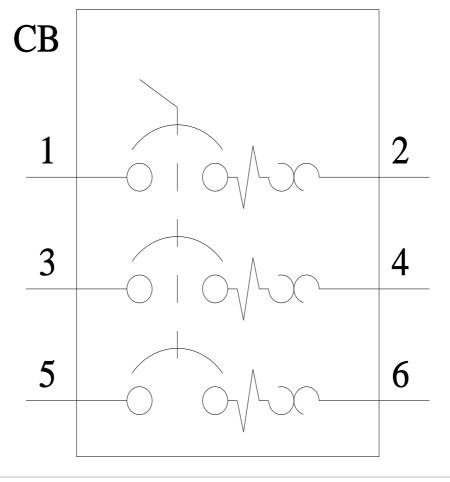












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