SIEMENS

Data sheet

3VA5170-4ED11-1AA0

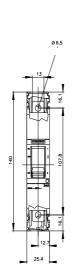


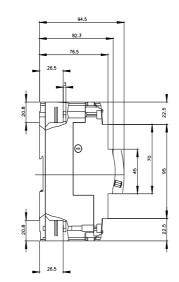
circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 277V 1-pole, line protection TM210, FTFM, In=70A overload protection Ir=70A fixed short-circuit protection li=10 x In UL 489 SB (naval), 50° C without connection

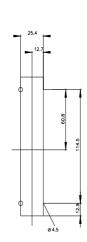
product brand name SENTRON product designation / according to UL file SEAM design of the product System protection design of the load switch / according to UL 489 / Hearing, Arr Conditioning, and Refrigeration circuit breaker (HACR Type) Yes design of the load switch / according to UL 489 / High-intensity: No Discharge circuit breaker (HOT Type) No design of the load switch / according to UL 489 / High-intensity: No Discharge circuit breaker (HOT Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (WOT Type) No design of the load switch / according to UL 489 / High-intensity: No portection tiruction of the overcurrent release TU210 number of poles 1 central technical data operating voles // 1 / Crated value operating voles // 1 / Crated value of the current / at AC / in hot operating voles // 1 / for rated value of the current / at AC / in hot operating voles // 1 / or rated value of the current / at AC / in at A00 electrical endurance (operating voles) / typical 20 000 electrical endurance (operating voles) / typical 8000 electrical endurance (operating voles) / upgradableretrofittable No	Model	
product designation / according to UL file SEAM design of the product System protection design of the load switch / according to UL 489 / Heating, Arr Yes design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HIO Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (WIO Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (WIO Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (WIO Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) No operating voltage / at AC / rated value 415 V operating voltage / at AC / rated value 415 V power loss [W] / for rated value of the current / at AC / In hot operating state / per pole 6.1 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 8 000 electrical endurance (operating cycles) / ta 80 V 8 000	product brand name	SENTRON
design of the product System protection design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigerater (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 / Nething Duty circuit breaker (IND Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (IND Type) No design of the oversurrent release TM210 protection function of the oversurrent release LI number of poles 1 operating voltage / at AC / rated value 6.1 W power loss (W) / for rated value of the current / at AC / in hot operating state / per pole 6.1 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 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-faultrance (operating cycles) / at AC-1 / at 380/415 V <td>product designation</td> <td>Molded-case circuit breaker</td>	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 circuit breaker (SWD Type) No design of the overcurrent release TM210 protection function of the overcurrent release Ll number of poles 1 contral tochnical data 6.1 W operating voltage / at AC / rated value 415 V power loss (W) / for arted value of the current / at AC / in hot operating state / per pole 6.1 W 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 A0 V 8 000 electrical endurance (operating cycles) / at 480 V 8 000 ground-fault monitoring version without product feature / for neutral conductors / upgradable/retrofittable No / short-full 0.38 kg Current 0.38 kg marking / according to UL 489 / 100%-rated breaker No opter dist for C 68 A • at 40 °C 68 A	product designation / according to UL file	SEAM
Conditioning, and Refrigeration circuit breaker (HACR Type) 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 TM210 protection function of the overcurrent release LI number of poles 1 Concrait to chricial data 6.1 W operating voltage / at AC / rated value 415 V power loss [W] / maximum 6.1 W operating state / per pole 000 electrical endurance (operating cycles) / typical 8000 electrical endurance (operating cycles) / ta AC / 1 at 380/415 V 8000 electrical endurance (operating cycles) / at AC / 1 at 380/415 V 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 feature / for neutral conductors / upgradable/retrofittable No o-ther measurement function No • other measurement function No • ot	design of the product	System protection
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 TM210 protection function of the overcurrent release Ll number of poles 1 Ceneral tochnical data 6.1 W power loss [W] / for rated value of the current / at AC / in hot operating soltage / at AC / rated value of the current / at AC / in hot operating state / per pole 6.1 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 A00 V 8 000 electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at A00 V 8 000 ground-fault monitoring version without product fueature / for neutral conductors / upgradable/retrofittable No / stot function No • other measurement function No • other measurement function No • at 45 °C		Yes
circuit breaker (SWD Type) TM210 design of the overcurrent release LI number of poles 1 constrait technical data		No
protection function of the overcurrent release Ll number of poles 1 General technical data		No
number of poles 1 General tochnical data	design of the overcurrent release	TM210
General tochnical data operating voltage / at AC / rated value 415 V power loss [W] / maximum 6.1 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 6.1 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 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 • other measurement function No Net Weight 0.38 kg Current marking / according to UL 489 / 100%-rated breaker • at 40 °C 69 A • at 55 °C 66 A • at 55 °C 66 A • at 60 °C 66 A • at 65 °C 65 A	protection function of the overcurrent release	LI
operating voltage / at AC / rated value 415 V power loss [W] / maximum 6.1 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 6.1 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 ABO V 8 000 electrical endurance (operating cycles) / at ABO V 8 000 electrical endurance (operating cycles) / at 4BO V 8 000 electrical endurance (operating cycles) / at 4BO 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 No e communication function No • communication function No • other measurement function No operational current 69 A • at 40 °C 69 A • at 50 °C 67 A	number of poles	1
intervent 6.1 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 6.1 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 0.38 kg Current eat 40 °C • at 40 °C 69 A • at 40 °C 69 A • at 55 °C 67 A • at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 A	General technical data	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole6.1 Wmechanical service life (operating cycles) / typical20 000electrical endurance (operating cycles) / at AC-1 / at 380/415 V8 000electrical endurance (operating cycles) / at A690 V4 000electrical endurance (operating cycles) / at 600 V4 000electrical endurance (operating cycles) / at 600 V4 000product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proofNoground-fault monitoring versionwithoutproduct functionNo• other measurement functionNoNet Weight0.38 kgCurrentmarking / according to UL 489 / 100%-rated breaker• at 40 °C69 A• at 45 °C69 A• at 55 °C67 A• at 60 °C66 A• at 65 °C65 A	operating voltage / at AC / rated value	415 V
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 V4 000electrical endurance (operating cycles) / at 600 V4 000product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proofNoground-fault monitoring versionwithoutproduct functionNo• communication functionNo• other measurement functionNoNet Weight0.38 kgCurrentmarking / according to UL 489 / 100%-rated breaker• at 40 °C69 A• at 45 °C69 A• at 55 °C67 A• at 60 °C66 A• at 65 °C65 A	power loss [W] / maximum	6.1 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 AB V 8 000 electrical endurance (operating cycles) / at AB 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 0.38 kg Current at 40 °C • at 40 °C 69 A • at 40 °C 69 A • at 50 °C 68 A • at 55 °C 67 A • at 60 °C 66 A • at 60 °C 65 A		6.1 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 0.38 kg Current marking / according to UL 489 / 100%-rated breaker operational current 69 A • at 40 °C 69 A • at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 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 No ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 0.38 kg Current	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 0.38 kg Current Image: Current marking / according to UL 489 / 100%-rated breaker No operational current 69 A • at 40 °C 69 A • at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 A	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 without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 0.38 kg Current marking / according to UL 489 / 100%-rated breaker No No operational current 70 A • at 40 °C 69 A • at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 A	electrical endurance (operating cycles) / at 480 V	8 000
/ short-circuit and overload proof ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 0.38 kg Current marking / according to UL 489 / 100%-rated breaker no operational current No • at 40 °C 70 A • at 45 °C 69 A • at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 A	electrical endurance (operating cycles) / at 600 V	4 000
product function No • communication function No • other measurement function No Net Weight 0.38 kg Current Current marking / according to UL 489 / 100%-rated breaker No operational current • at 40 °C 70 A • at 45 °C 69 A • at 50 °C 68 A • at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 A		No
• communication functionNo• other measurement functionNoNet Weight0.38 kgCurrentCurrentmarking / according to UL 489 / 100%-rated breakerNooperational current70 A• at 40 °C69 A• at 55 °C68 A• at 55 °C67 A• at 60 °C66 A• at 65 °C65 A	ground-fault monitoring version	without
• other measurement functionNoNet Weight0.38 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational currentNo• at 40 °C70 A• at 45 °C69 A• at 55 °C68 A• at 55 °C67 A• at 60 °C66 A• at 65 °C65 A	product function	
Net Weight0.38 kgCurrentNomarking / according to UL 489 / 100%-rated breakerNooperational current70 A• at 40 °C70 A• at 45 °C69 A• at 55 °C68 A• at 55 °C67 A• at 60 °C66 A• at 65 °C65 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 69 A • at 50 °C 68 A • at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 A	 other measurement function 	No
marking / according to UL 489 / 100%-rated breakerNooperational current-• at 40 °C70 A• at 45 °C69 A• at 50 °C68 A• at 55 °C67 A• at 60 °C66 A• at 65 °C65 A	Net Weight	0.38 kg
operational current 70 A • at 40 °C 70 A • at 45 °C 69 A • at 50 °C 68 A • at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 A	Current	
• at 40 °C 70 A • at 45 °C 69 A • at 50 °C 68 A • at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 A	marking / according to UL 489 / 100%-rated breaker	No
• at 45 °C 69 A • at 50 °C 68 A • at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 A	operational current	
• at 50 °C 68 A • at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 A	● at 40 °C	70 A
• at 55 °C 67 A • at 60 °C 66 A • at 65 °C 65 A	● at 45 °C	69 A
• at 60 °C 66 A • at 65 °C 65 A	● at 50 °C	68 A
• at 65 °C 65 A	● at 55 °C	67 A
	● at 60 °C	66 A
• at 70 °C 64 A	● at 65 °C	65 A
	• at 70 °C	64 A

Switching capacity according to IEC 60947				
switching capacity class of the circuit breaker	S			
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 120 V	65 kA			
• at 277 V	25 kA			
• at 347 V	14 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 absolute value 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]	5.51 in			
height	140 mm			
width [in]	1 in			
width	25.4 mm			
depth [in]	3.01 in			
depth	76.5 mm			
Connections				
arrangement of electrical connectors / for main current circuit	Without connection			
type of electrical connection / for main current circuit	Without			
Auxiliary circuit				
number of CO contacts / for auxiliary contacts	0			
Accessories				
	No			
product extension / optional / motor drive Environmental conditions	No			
protection class IP / on the front	IP40			
ambient temperature	25.10			
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				

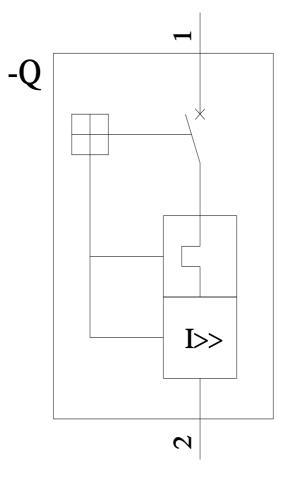
	EMC	Declaration of Conformity		Test Certificates	Marine / Shipping
EHC	RCM	CE EG-Konf.	UK CA	Type Test Certific- ates/Test Report	ABS
Marine / Shipping				other	
		Lloydis Register urs		<u>Confirmation</u>	<u>Miscellaneous</u>
other					
	•	se/siemens-wind-down-russian-b			
iemens is working or		e status of validity of the EAC certi	fication if you inte	end to import or offer to supp	ply these products to a
iemens is working or lease contact your loca AC relevant market (of formation on the pac ttps://support.industry formation- and Down ttp://www.siemens.com ndustry Mall (Online of ttps://mall.industry.siem ervice&Support (Mar	al Siemens office on the ther than the sanctione ckaging siemens.com/cs/ww/en hloadcenter (Catalogs h/lowvoltage/catalogs ordering system) mens.com/mall/en/en/C huals, Certificates, Ch	e status of validity of the EAC certi d EAEU member states Russia or /view/109813875	Belarus).	na to import or offer to sup	oly these products to a

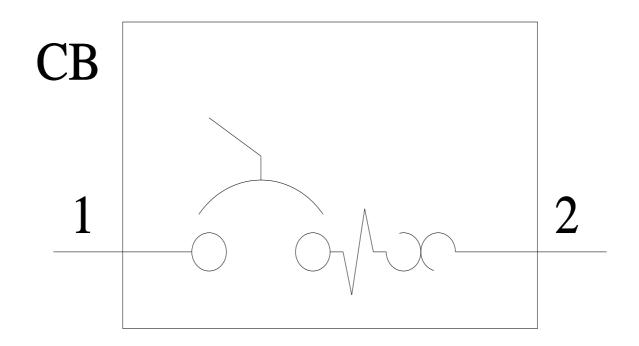












last modified:

7/15/2022 🖸