SIEMENS

Data sheet

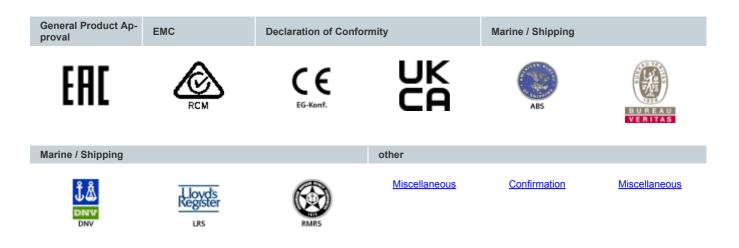
3VA5110-4ED11-1AA0



circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 277V 1-pole, line protection TM210, FTFM, In=100A overload protection Ir=100A fixed short-circuit protection Ii=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 / Hagh-Intensity- Yes Decknage circuit breaker (HACR Type) No design of the load switch / according to UL 489 / High-Intensity- No Decknage circuit breaker (HO Type) No design of the load switch / according to UL 489 / High-Intensity- No Decknage circuit breaker (HO Type) No design of the load switch / according to UL 489 / Switching Duty No ricult breaker (WD Type) No design of the load switch / according to UL 489 / Treate Switching Duty No ricult breaker (WD Type) No design of the load switch / according to UL 489 / Treate Switching Duty No ricult breaker (SWD Type) ELI number of poles 1 power loss [W] / maximum 7.6 W power loss [W] / for rated value of the current / at AC / in hot 7.6 W operating vicks) / at CC / in at 800 V 4 000 electrical endurance (operating cycles) / at AC / in ASO V 4 000	Model	
product designation / according to UL file SEAM design of the product System protection design of the load switch / according to UL 489 / High-Intensity Yes Discharge circuit breaker (HIACR Type) No design of the load switch / according to UL 489 / High-Intensity No design of the load switch / according to UL 489 / High-Intensity No design of the load switch / according to UL 489 / Switching Duty circuit breaker (HID Type) No design of the overcurrent release TM210 protection function of the overcurrent release I 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 7.6 W mechanical service Ific (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 20 000 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/retrofittable No • other measurement function No • other measurement function	product brand name	SENTRON
design of the product System protection design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigerating (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 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 / Intensity- Discharge circuit breaker (Intensity Discharge) No operating voltage / at AC / rated value 1 operating voltage / at AC / rated value 415 V power loss [W] / maximum 7.6 W operating state / per pole 7.6 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 690 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof 9 000 ground-fault monitoring version <	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 (HD Type) No design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HD Type) No design of the load switch / according to UL 489 / Switching Duty drout breaker (SWD Type) No design of the load switch / according to UL 489 / Switching Duty drout breaker (SWD Type) No design of the load switch / according to UL 489 / Switching Duty drout breaker (SWD Type) No design of the load switch / according to UL 489 / Switching Duty drout breaker (SWD Type) No design of the load switch / according to UL 489 / Switching Duty drout breaker (SWD Type) No design of the load switch / according to UL 489 / Switching Duty drout breaker (SWD Type) No constant constant circuit breaker The UL 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 76 W mechanical service life (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AO V 8 000 electrical endurance (operating cycles) / at AO V 8 000 ground-fault monitoring version without product function No other m	product designation / according to UL file	SEAM
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 (HID Type) No design of the overcurrent release TM210 protection function of the overcurrent release LI number of poles 1 Control to the overcurrent release LI operating voltage / at AC / rated value 415 V power loss [W] / maximum 7.6 W operating voltage / at AC / rated value of the current / at AC / in hot operating state / per pole 7.6 W electrical endurance (operating cycles) / typical 8.000 electrical endurance (operating cycles) / typical 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 neutral conductors / upgradable/retrofittable No other measurement function No other measu	design of the product	System protection
Discharge circuit breaker (HID Type) No design of the load switch / according to UL 489 / Switching Duty No circuit breaker (SWD Type) TM210 protection function of the overcurrent release Ll number of poles 1 Ceneral technical data		Yes
circuit breaker (SWD Type) TM210 protection function of the overcurrent release LI number of poles 1 General technical data	° ° ,	No
protection function of the overcurrent release Ll number of poles 1 General technical data		No
number of poles 1 General technical data 415 V operating voltage / at AC / rated value 415 V power loss [W] / maximum 7.6 W power loss [W] / trated value of the current / at AC / in hot operating state / per pole 7.6 W mechanical service life (operating cycles) / thycial 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 800 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without poduct function No • other measurement function No • other measurement function No • other measurement function No • at 40 °C 100 A • at 40 °C 95 A • at 50 °C 95 A • at 50 °C 95 A • at 65 °C	design of the overcurrent release	TM210
Genoral technical data operating voltage / at AC / rated value 415 V power loss [W] / for rated value of the current / at AC / in hot 7.6 W 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 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 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 No / stort-circuit and overload proof without ground-fault monitoring version without product function No • other measurement function No Net Weight 0.38 kg Current 100 A • at 40 °C 95 A • at 50 °C 95 A • at 50 °C 95 A • at 55 °C 89 A	protection function of the overcurrent release	LI
operating voltage / at AC / rated value 415 V power loss [W] / maximum 7.6 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 7.6 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 AC0 V 8 000 electrical endurance (operating cycles) / at AC0 V 8 000 electrical endurance (operating cycles) / at AC0 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No /stort-circuit and overload proof No ground-fault monitoring version without product function No • communication function No Net Weight 0.38 kg Current marking / according to UL 489 / 100%-rated breaker operational current 415 °C • at 40 °C 100 A • at 50 °C 95 A • at 50 °C	number of poles	1
power loss [W] / maximum 7.6 W power loss [W] / for rated value of the current / at AC / in hot 7.6 W operating state / per pole 7.6 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) / 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 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 No ground-fault monitoring version without product function No • other measurement function No Net Weight 0.38 kg Current Imaxing / according to UL 489 / 100%-rated breaker operational current 98 A • at 40 °C 98 A • at 55 °C 93 A • at 60 °C 91 A • at 65 °C 89 A <td colspan="2">General technical data</td>	General technical data	
power loss [W] / for rated value of the current / at AC / in hot 7.6 W operating state / per pole 7.6 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 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 • other measurement function No Net Weight 0.38 kg Current	operating voltage / at AC / rated value	415 V
operating staté / per pole 20 000 mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at 380/415 V 8 000 electrical endurance (operating cycles) / at 690 V 4 000 electrical endurance (operating cycles) / at 800 V 8 000 electrical endurance (operating cycles) / at 800 V 4 000 electrical endurance (operating cycles) / at 800 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / shot-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 marking / according to UL 489 / 100%-rated breaker No operational current se A • at 40 °C 98 A • at 50 °C 93 A • at 60 °C 91 A • at 60 °C 89 A	power loss [W] / maximum	7.6 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 No ground-fault monitoring version without product function No • other measurement function No • at 40 °C 100 A • at 40 °C 98 A • at 45 °C 98 A • at 55 °C 93 A • at 60 °C 91 A • at 65 °C 89 A		7.6 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 100 A • at 40 °C 98 A • at 50 °C 93 A • at 65 °C 89 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 Net Weight 0.38 kg Current marking / according to UL 489 / 100%-rated breaker No No operational current 100 A • at 40 °C 98 A • at 50 °C 93 A • at 50 °C 91 A • at 65 °C 89 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 0.38 kg Current No marking / according to UL 489 / 100%-rated breaker No operational current 100 A • at 40 °C 98 A • at 50 °C 93 A • at 60 °C 91 A • at 65 °C 89 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 100 A • at 40 °C 98 A • at 55 °C 93 A • at 60 °C 91 A • at 65 °C 89 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 0.38 kg Current 0.38 kg marking / according to UL 489 / 100%-rated breaker No operational current 100 A • at 40 °C 98 A • at 50 °C 95 A • at 55 °C 93 A • at 60 °C 91 A • at 65 °C 89 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 marking / according to UL 489 / 100%-rated breaker Marking / according to UL 489 / 100%-rated breaker No operational current 100 A • at 40 °C 100 A • at 50 °C 98 A • at 55 °C 93 A • at 60 °C 91 A • at 65 °C 89 A		No
• communication functionNo• other measurement functionNoNet Weight0.38 kgCurrentCurrentmarking / according to UL 489 / 100%-rated breakerNooperational current100 A• at 40 °C100 A• at 45 °C98 A• at 55 °C95 A• at 60 °C91 A• at 65 °C89 A	ground-fault monitoring version	without
• other measurement functionNoNet Weight0.38 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational currentNo• at 40 °C100 A• at 45 °C98 A• at 55 °C95 A• at 55 °C93 A• at 60 °C91 A• at 65 °C89 A	product function	
Net Weight0.38 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational currentNo• at 40 °C100 A• at 45 °C98 A• at 55 °C95 A• at 60 °C91 A• at 65 °C89 A	 communication function 	No
Current No marking / according to UL 489 / 100%-rated breaker No operational current 100 A • at 40 °C 100 A • at 45 °C 98 A • at 50 °C 95 A • at 55 °C 93 A • at 60 °C 91 A • at 65 °C 89 A	 other measurement function 	No
marking / according to UL 489 / 100%-rated breakerNooperational current-• at 40 °C100 A• at 45 °C98 A• at 50 °C95 A• at 55 °C93 A• at 60 °C91 A• at 65 °C89 A	Net Weight	0.38 kg
operational current 100 A • at 40 °C 100 A • at 45 °C 98 A • at 50 °C 95 A • at 55 °C 93 A • at 60 °C 91 A • at 65 °C 89 A	Current	
• at 40 °C 100 A • at 45 °C 98 A • at 50 °C 95 A • at 55 °C 93 A • at 60 °C 91 A • at 65 °C 89 A	marking / according to UL 489 / 100%-rated breaker	No
• at 45 °C 98 A • at 50 °C 95 A • at 55 °C 93 A • at 60 °C 91 A • at 65 °C 89 A	operational current	
• at 50 °C 95 A • at 55 °C 93 A • at 60 °C 91 A • at 65 °C 89 A	• at 40 °C	100 A
• at 55 °C 93 A • at 60 °C 91 A • at 65 °C 89 A	• at 45 °C	98 A
• at 60 °C 91 A • at 65 °C 89 A	● at 50 °C	95 A
• at 65 °C 89 A	● at 55 °C	93 A
	● at 60 °C	91 A
• at 70 °C 87 A	● at 65 °C	89 A
	● at 70 °C	87 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 maximum 	100 A 100 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	1 000 A
• maximum	1 000 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	100 100 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	
product extension / optional / motor drive	No
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)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5110-4ED11-1AA0}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5110-4ED11-1AA0

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

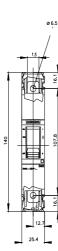
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5110-4ED11-1AA0

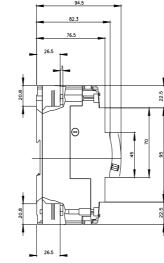
CAx-Online-Generator

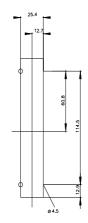
http://www.siemens.com/cax

Tender specifications

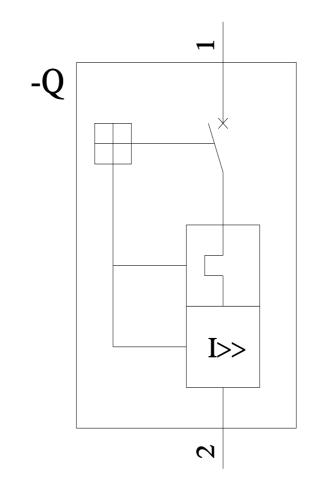
http://www.siemens.com/specifications

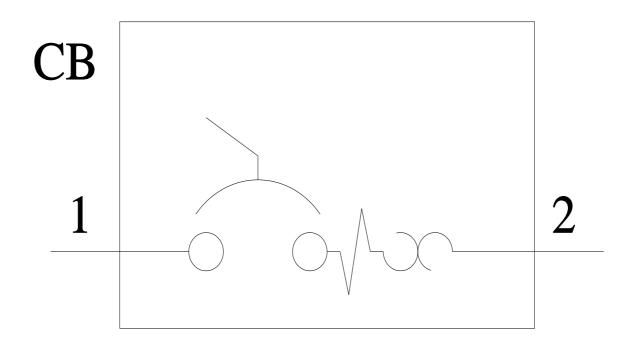












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