## SIEMENS

## Data sheet

## 3VA5150-4ED11-1AA0

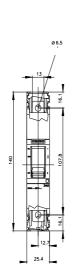


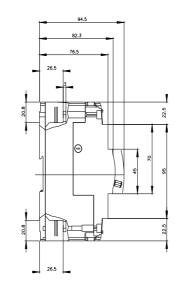
circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 277V 1-pole, line protection TM210, FTFM, In=50A overload protection Ir=50A fixed short-circuit protection li=10 x In UL 489 SB (naval), 50° C without connection

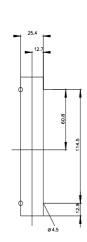
product brand name         SENTRON           product designation / according to UL file         SEAM           design of the product         System protection           design of the load switch / according to UL 489 / Heahing, Ar         Yes           Deckage circuit breaker (HACR Type)         Yes           design of the load switch / according to UL 489 / Switching Duty         No           drinut breaker (WD Type)         No           design of the load switch / according to UL 489 / Switching Duty         No           drinut breaker (WD Type)         No           design of the load switch / according to UL 489 / Switching Duty         No           drinut breaker (WD Type)         No           design of the load switch / according to UL 489 / Switching Duty         No           ricrus breaker (HD Type)         No           design of the load switch / according to UL 489 / Switching Duty         No           ordination of the overcurrent release         LL           number of poles         1           power loss [W] / maximum         4 W           power loss [W] / maximum         4 W           power loss [W] / maximum         8 0000           electrical endurance (operating cycles) / ta C-1 / at 890 V         4 000           electrical endurance (operating cycles) / at 800 V         4 000 </th <th>Model</th> <th></th>	Model	
product designation / according to UL file         SEAM           design of the product         System protection           design of the load switch / according to UL 489 / Heating, Ar         Yes           Conditioning, and Refrigeration circuit breaker (HACR Type)         Yes           design of the load switch / according to UL 489 / High-Intensity:         Yes           Discharge circuit breaker (HIT Type)         Yes           design of the load switch / according to UL 489 / Switching Duty         No           circuit breaker (HIT Type)         No           design of the overcurrent release         Ll           number of poles         1           Central technical data            operating voltage / at AC / rated value         415 V           power loss [W] / for rated value of the current / at AC / in hot         4 W           operating state / per pole         20 000           electrical endurance (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 / upgradableretrofittable         No	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)     Yes       design of the load switch / according to UL 489 / Nething Duty circuit breaker (IGND Type)     No       design of the load switch / according to UL 489 / Switching Duty circuit breaker (IGND Type)     No       design of the load switch / according to UL 489 / Switching Duty circuit breaker (IGND Type)     No       design of the load switch / according to UL 489 / Nething Duty circuit breaker (ISND Type)     No       design of the load switch / according to UL 489 / Nething Duty circuit breaker (ISND Type)     No       operating voltage / at AC / rated value     415 V       power loss [W] / maximum     4 W       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     4000       mechanical service life (operating cycles) / t 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 680 V     4 000       product feature / for neutral con	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)     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 / 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 overcurrent release     LL       number of poles     1       coneratio tochnical data	product designation / according to UL file	SEAM
Conditioning, and Refrigeration circuit breaker (HACR Type)       Yes         design of the load switch / according to UL 489 / High-Intensity- Discharge cruit breaker (HID Type)       No         design of the load switch / according to UL 489 / Switching Duty circuit Dreaker (SWD Type)       No         design of the overcurrent release       TM210         protection function of the overcurrent release       LI         number of poles       1         Conditioning and Refrigeration according to UL 489 / Switching Duty circuit Dreaker (SWD Type)       4W         operating voltage / at AC / rated value       415 V         power toss [W] / maximum       4 W         operating voltage / at AC / rated value of the current / at AC / in hot operating state / per pole       4000         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         ground-fault monitoring version       without         product feature / for neutral conductors / upgradable/retrofittable       No         orthorizerut and overload proof       No         either measurement function       No         outher measurement function       No         o	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 technical data		Yes
circuit breaker (SWD Type)       TM210         design of the overcurrent release       Ll         number of poles       1         coperating voltage / at AC / rated value       415 V         operating voltage / at AC / rated value       415 V         power loss [W] / maximum       4 W         power loss [W] / maximum       4 W         power loss [W] / maximum       4 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       20 000         electrical endurance (operating cycles) / typical       20 000         electrical endurance (operating cycles) / typical       20 000         electrical endurance (operating cycles) / typical       20 000         electrical endurance (operating cycles) / ta AC-1 / at 380/415 V       8 000         electrical endurance (operating cycles) / ta AE0 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       ground-fault monitoring version         other measurement function       No         • other measurement function       No         • other measurement function       No         • other measurement       50 A         • at 4	5 5 F ,	Yes
protection function of the overcurrent release       L1         number of poles       1         General technical data		No
number of poles       1         General technical data	design of the overcurrent release	TM210
General technical data       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     4 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       ground-fault monitoring version     without       product function     No       • other measurement function     No       • other measurement function     No       Net Weight     0.38 kg       Current     49 A       • at 40 °C     50 A       • at 45 °C     49 A       • at 55 °C     45 A	protection function of the overcurrent release	L
operating voltage / at AC / rated value         415 V           power loss [W] / maximum         4 W           power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         4 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 ABO 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           operational current         50 A           • at 40 °C         50 A           • at 40 °C         49 A           • at 50 °C         47 A           • at 50 °C         46 A	number of poles	1
power loss [W] / maximum       4 W         power loss [W] / for rated value of the current / at AC / in hot       4 W         power loss [W] / for rated value of the current / at AC / in hot       4 W         mechanical service life (operating cycles) / typical       20 000         electrical endurance (operating cycles) / tAC-1 / at 380/415 V       8 000         electrical endurance (operating cycles) / at AC-1 / at 690 V       4 000         electrical endurance (operating cycles) / at 80 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       No         ground-fault monitoring version       without         product function       No         • other measurement function       No         Net Weight       0.38 kg         Current       at 40 °C         • at 40 °C       50 A         • at 40 °C       49 A         • at 45 °C       47 A         • at 60 °C       46 A         • at 60 °C       46 A         • at 60 °C       46 A         • at 65 °C       45 A	General technical data	
power loss [W] / for rated value of the current / at AC / in hot       4 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 0 / at 690 V       4 000         electrical endurance (operating cycles) / at AC 0 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         • other measurement function       No         operational current       •         • at 40 °C       50 A         • at 45 °C       49 A         • at 55 °C       47 A         • at 55 °C       46 A         • at 65 °C       45 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 °C50 A• at 45 °C49 A• at 55 °C47 A• at 60 °C46 A• at 65 °C45 A	power loss [W] / maximum	4 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-1 / at 690 V       8 000         electrical endurance (operating cycles) / at AC-1 / at 690 V       8 000         electrical endurance (operating cycles) / at AC-1 / at 690 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       without         ground-fault monitoring version       without         product function       No         • other measurement function       No         • other measurement function       No         • other measurement function       No         operational current       0.38 kg         • at 40 °C       50 A         • at 40 °C       49 A         • at 40 °C       49 A         • at 50 °C       48 A         • at 55 °C       47 A         • at 60 °C       46 A         • at 65 °C       45 A		4 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       50 A         • at 40 °C       49 A         • at 55 °C       47 A         • at 65 °C       45 A	mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at 480 V8 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 °C50 A• at 40 °C49 A• at 55 °C47 A• at 65 °C45 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       50 A         • at 40 °C       49 A         • at 50 °C       48 A         • at 55 °C       47 A         • at 60 °C       46 A         • at 65 °C       45 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       50 A         • at 40 °C       50 A         • at 45 °C       49 A         • at 55 °C       47 A         • at 60 °C       46 A         • at 65 °C       45 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       0.38 kg         Current       No         marking / according to UL 489 / 100%-rated breaker       No         operational current       50 A         • at 40 °C       49 A         • at 50 °C       48 A         • at 55 °C       47 A         • at 60 °C       46 A         • at 65 °C       45 A	electrical endurance (operating cycles) / at 600 V	4 000
product functionNo• communication functionNo• other measurement functionNoNet Weight0.38 kgCurrentmarking / according to UL 489 / 100%-rated breakerNoNooperational currentNo• at 40 °C50 A• at 45 °C49 A• at 55 °C47 A• at 60 °C46 A• at 65 °C45 A		No
• communication functionNo• other measurement functionNoNet Weight0.38 kgCurrentCurrentmarking / according to UL 489 / 100%-rated breakerNooperational current50 A• at 40 °C50 A• at 45 °C49 A• at 55 °C48 A• at 60 °C46 A• at 65 °C45 A	ground-fault monitoring version	without
• other measurement functionNoNet Weight0.38 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational currentNo• at 40 °C50 A• at 45 °C49 A• at 55 °C48 A• at 55 °C47 A• at 60 °C46 A• at 65 °C45 A	product function	
Net Weight0.38 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational currentNo• at 40 °C50 A• at 45 °C49 A• at 55 °C48 A• at 55 °C47 A• at 60 °C46 A• at 65 °C45 A	<ul> <li>communication function</li> </ul>	No
Current       No         marking / according to UL 489 / 100%-rated breaker       No         operational current       50 A         • at 40 °C       50 A         • at 45 °C       49 A         • at 50 °C       48 A         • at 55 °C       47 A         • at 60 °C       46 A         • at 65 °C       45 A	<ul> <li>other measurement function</li> </ul>	No
marking / according to UL 489 / 100%-rated breakerNooperational current50 A• at 40 °C50 A• at 45 °C49 A• at 50 °C48 A• at 55 °C47 A• at 60 °C46 A• at 65 °C45 A	Net Weight	0.38 kg
operational current• at 40 °C50 A• at 45 °C49 A• at 50 °C48 A• at 55 °C47 A• at 60 °C46 A• at 65 °C45 A	Current	
• at 40 °C       50 A         • at 45 °C       49 A         • at 50 °C       48 A         • at 55 °C       47 A         • at 60 °C       46 A         • at 65 °C       45 A	marking / according to UL 489 / 100%-rated breaker	No
• at 45 °C       49 A         • at 50 °C       48 A         • at 55 °C       47 A         • at 60 °C       46 A         • at 65 °C       45 A	operational current	
• at 50 °C       48 A         • at 55 °C       47 A         • at 60 °C       46 A         • at 65 °C       45 A	• at 40 °C	50 A
• at 55 °C       47 A         • at 60 °C       46 A         • at 65 °C       45 A	• at 45 °C	49 A
• at 60 °C 46 A • at 65 °C 45 A	● at 50 °C	48 A
• at 65 °C 45 A	● at 55 °C	47 A
	● at 60 °C	46 A
• at 70 °C 44 A	● at 65 °C	45 A
	• at 70 °C	44 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 (lr) / of the L-trip / with l2t characteristic	
<ul> <li>minimum</li> <li>maximum</li> </ul>	50 A 50 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 l-tripping	
• minimum	500 A
• maximum	500 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	35 50 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	
Confirmation	Miscellaneous
CCC UL	UL VDE

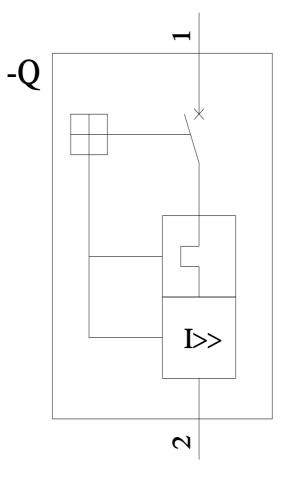
proval	EMC	Declaration of Conformity		Test Certificates	Marine / Shipping
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Marine / Shipping				other	
		Llovd's Register uis	KMRS RMRS	<u>Confirmation</u>	<u>Miscellaneous</u>
other					
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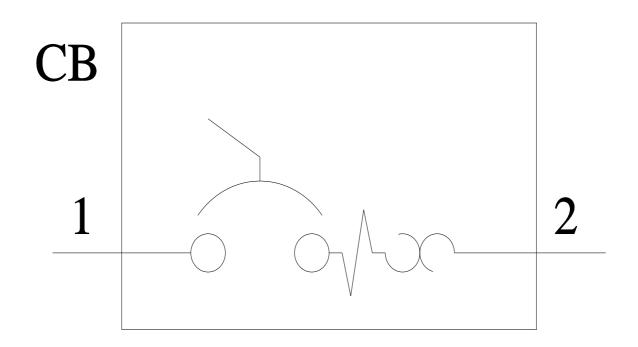












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