SIEMENS

Data sheet

3VA5190-4ED22-1AA0



circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 480 V 2-pole, line protection TM210, FTFM, In=90A overload protection Ir=90A fixed short-circuit protection Ii=10 x In UL489 SB (naval), 50 deg. cel. nut keeper kit on both sides

product brand name SENTRON product designation Molded-case circuit breaker product designation / according to UL file SEAM design of the product System protection 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	
product designation / according to UL file SEAM design of the product System protection design of the load switch / according to UL 489 / Heating, Air Yes Conditioning, and Refrigeration circuit breaker (HACR Type) No	
design of the product System protection design of the load switch / according to UL 489 / Heating, Air Yes Conditioning, and Refrigeration circuit breaker (HACR Type) No	
design of the load switch / according to UL 489 / Heating, Air Yes Conditioning, and Refrigeration circuit breaker (HACR Type) Yes design of the load switch / according to UL 489 / High-Intensity- No	
Conditioning, and Refrigeration circuit breaker (HACR Type) 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 (SWD Type)	
design of the overcurrent release TM210	
protection function of the overcurrent release	
number of poles 2	
General technical data	
operating voltage / at AC / rated value 415 V	
power loss [W] / maximum 14.26 W	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 7.13 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 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	
ground-fault monitoring version without	
product function	
communication function No	
other measurement function No	
Net Weight 0.669 kg	
Current	
marking / according to UL 489 / 100%-rated breaker No	
operational current	
• at 40 °C 90 A	
• at 45 °C 88 A	
• at 50 °C 86 A	
• at 55 °C 84 A	
• at 60 °C 82 A	
• at 65 °C 80 A	
• at 70 °C 79 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 240 V	65 kA	
• at 480 V	25 kA	
• at 600 Y/347 V	14 kA	
Adjustable parameters		
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic		
• minimum	90 A	
• maximum	90 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	900 A	
• maximum	900 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	90 90 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]	2 in	
width	50.8 mm	
depth [in]	3.01 in	
depth	76.5 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	12 x 1 mm	
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	17 x 6.5 mm	
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)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5190-4ED22-1AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5190-4ED22-1AA0

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

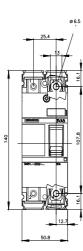
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5190-4ED22-1AA0

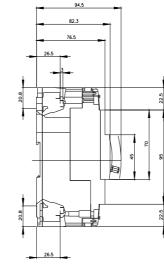
CAx-Online-Generator

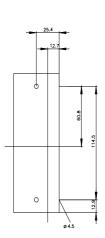
http://www.siemens.com/cax

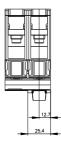
Tender specifications

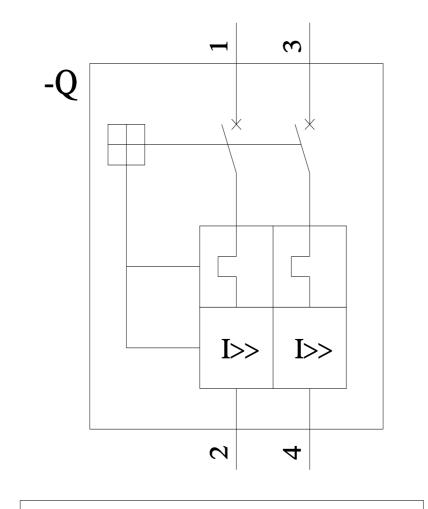
http://www.siemens.com/specifications

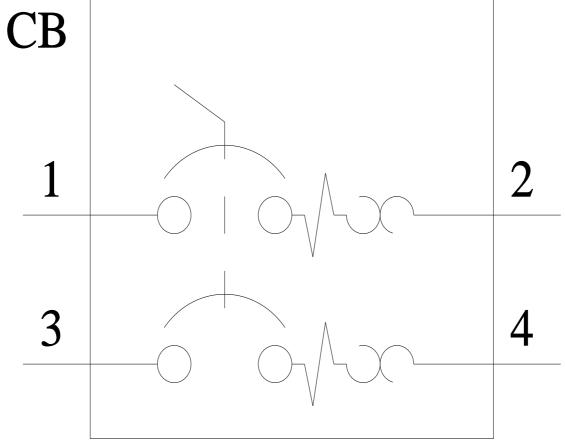












last modified:

8/15/2023 🖸

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens: 3VA51904ED221AA0