SIEMENS

Data sheet

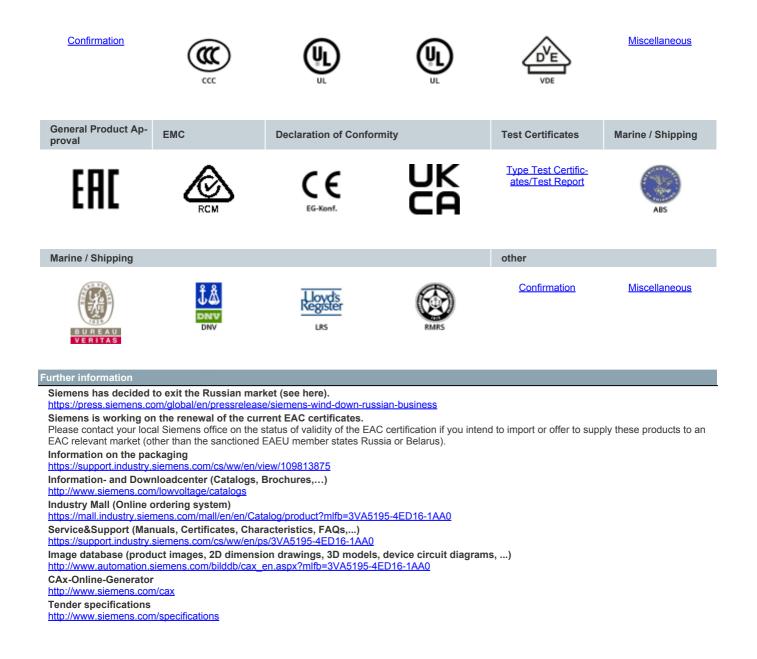
3VA5195-4ED16-1AA0

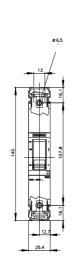


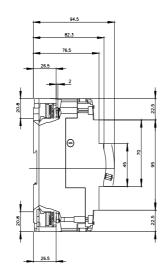
circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 277 V 1-pole, line protection TM210, FTFM, In=15A overload protection Ir=15A fixed short-circuit protection Ii=20 x In UL489 SB (naval), 50 deg. cel. cable connection on both sides

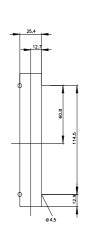
| product brank name SENTRON product designation Molded-case circuit breaker product designation / according to UL file SEAM design of the product. System protection design of the load switch / according to UL 489 / Healing, Arr Yes Conditioning, and Refingeration circuit breaker (HACR Type) Yes design of the load switch / according to UL 489 / High-Intensity Yes design of the load switch / according to UL 489 / High-Intensity Yes design of the load switch / according to UL 489 / Switching Duty Yes design of the overcurrent release TM210 protection function of the overcurrent release 1 operating voltage / at AC / rated value 415 V opperating voltage / at AC / rated value 415 V operating voltage / at AC / rated value 415 V operating voltage / at AC / rated value 405 V operating voltage / at AC / rated value 415 V operating voltage / at AC / rated value 400 O electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / ta 60 V 8 000 electrical endurance (operating cyc | Model | |
|--|--|-----------------------------|
| product designation / according to UL file SEAM design of the product System protection design of the load switch / according to UL 489 / Heating, AT Yes design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HAD Type) Yes design of the load switch / according to UL 489 / Switching Duty circuit breaker (HAD Type) Yes design of the load switch / according to UL 489 / Switching Duty circuit breaker (WID Type) Yes design of the load switch / according to UL 489 / Switching Duty circuit breaker (WID Type) Yes design of the overcurrent release TM210 protection function of the overcurrent release 1 ceneral technical data 3.2 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 3.2 W power loss [W] / for rated value of the current / at AC / in tot operating state / per pole 8000 electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 8000 electrical endurance (operating cycles) / typical 8000 electrical endurance (operating cycles) / tat AD V 8000 ground-fault monitoring version without < | 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 (HAC Type) Yes design of the load switch / according to UL 489 / Switching Duty circuit breaker (ISWD Type) Yes design of the load switch / according to UL 489 / Switching Duty circuit breaker (ISWD Type) Yes design of the vorcurrent release TM210 protection function of the overcurrent release Ll number of poles 1 General technical data operating voltage / at AC / rated value power loss [W] / maximum 3.2 W power loss [W] / for rated value of the current / at AC / in hot operating voltage / per pole 3.2 W electrical endurance (operating cycles) / at AC-1 / at 880/415 W 8000 electrical endurance (operating cycles) / at AC-1 / at 880/415 W 8000 electrical endurance (operating cycles) / at AC-1 / at 880/415 W 8000 electrical endurance (operating cycles) / at AC-1 / at 880/415 W 8000 electrical endurance (operating cycles) / at AC-1 / at 880/415 W 8000 ground-fault monitoring version without product faulter / for neutral conductors | 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 (HIC Type) Yes design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (KHD Type) Yes design of the overcurrent release TM210 protection function of the overcurrent release Ll number of poles 1 General technical data 9perating voltage / at AC / rated value opwer loss [W] / maximum 3.2 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) / 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 ABO V 8 000 ground-fault monitoring cycles) / at ABO V 8 000 / short-dircuit and overload proof yugradable/retrofittable / short-dircuit and overload proof 000 ground-fault monitoring version without product function | product designation / according to UL file | SEAM |
| Conditioning, and Refrigeration circuit breaker (HACR Type) Yes design of the load switch / according to UL 489 / Migh-Intensity- Discharge circuit breaker (HID Type) Yes design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) Yes design of the overcurrent release TM210 protection function of the overcurrent release I General tochnical data 1 operating voltage / at AC / rated value 415 V operating voltage / at AC / rated value of the current / at AC / in hot operating state / per pole 3.2 W mechanical service life (operating cycles) / ta 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 electrical endurance (operating cycles) / at AB0 V 8 000 electrical endurance (operating cycles) / at AB0 V 8 000 electrical endurance (operating cycles) / at AB0 V 8 000 ground-fault monitoring version without product feature / for neutral conductors / upgradable/retrofittable No / softer measurement function No • other measurement function No • other measurement function | design of the product | System protection |
| Discringe circuit breaker (HID Type) Yes design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) Yes design of the overcurrent release TM210 protection function of the overcurrent release Ll number of poles 1 Genoral technical data 9000 operating voltage / at AC / rated value 415 V power loss [W] / maximum 3.2 W power loss [W] / for rated value of the current / at AC / in hot operating stel / per pole 3.2 W electrical endurance (operating cycles) / tpical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 680 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-foult and overload proof without ground-fault monitoring version without product facture / for neutral conductors / upgradable/retrofittable No • other measurement function No • other measurement function No • other measurement function 15 A • at 40 °C 15 A • at 40 °C 14 A | | Yes |
| circuit breaker (SWD Type) TM210 protection function of the overcurrent release LL number of poles 1 Ceneral technical data 3.2 W operating voltage / at AC / rated value 415 V power loss [W] / maximum 3.2 W operating voltage / at AC / rated value of the current / at AC / in hot 3.2 W operating state / per pole 3.2 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 AC0 V 8 000 electrical endurance (operating cycles) / at AC0 V 8 000 electrical endurance (operating cycles) / at AC0 V 8 000 ground-fault monitoring version without product fault monitoring version without product fault monitoring version without product fault monitoring version No other measurement function No other measurement function No operatinal current | | Yes |
| protection function of the overcurrent release L1 number of poles 1 General technical data | 0 0 , | Yes |
| number of poles 1 General technical data 415 V power loss [W] / maximum 3.2 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 3.2 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 680 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 0 • other measurement function No • other measurement function No • other measurement function No • other 0°C 15 A • at 40 °C 15 A • at 40 °C 15 A • at 45 °C 15 A • at 45 °C 14 A • at 50 °C 14 A • at 60 °C 14 A | design of the overcurrent release | TM210 |
| General technical data operating voltage / at AC / rated value 415 V power loss [W] / maximum 3.2 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 3.2 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 AC 0 V 8 000 electrical endurance (operating cycles) / at AC V 8 000 electrical endurance (operating cycles) / at AC V 8 000 ground-fault monitoring 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 • cother measurement function No Net Weight 0.398 kg Current 15 A • at 40 °C 15 A • at 40 °C 15 A <td>protection function of the overcurrent release</td> <td>LI</td> | protection function of the overcurrent release | LI |
| operating voltage / at AC / rated value 415 V power loss [W] / maximum 3.2 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 3.2 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 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 480 V 8 000 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 Net Weight 0.398 kg Current 15 A • at 40 °C 15 A • at 40 °C 15 A • at 45 °C <td>number of poles</td> <td>1</td> | number of poles | 1 |
| power loss [W] / maximum 3.2 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 3.2 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 380/415 V 8 000 electrical endurance (operating cycles) / at AO V 8 000 electrical endurance (operating cycles) / at AO 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 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 Nother measurement function No operational current 15 A • at 40 °C 15 A • at 40 °C 15 A • at 50 °C 14 A • at 50 °C 14 A • at 60 °C 14 A | General technical data | |
| power loss [W] / for rated value of the current / at AC / in hot 3.2 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-1 / at 690 V 4 000 electrical endurance (operating cycles) / at 600 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 • other measurement function No • other measurement function No • at 40 °C 15 A • at 40 °C 15 A • at 40 °C 15 A • at 45 °C 14 A • at 50 °C 14 A • at 60 °C 14 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 AC-1 / at 690 V4 000electrical 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• other measurement functionNoNet Weight0.398 kgCurrentImarking / according to UL 489 / 100%-rated breaker• at 40 °C15 A• at 40 °C15 A• at 50 °C14 A• at 55 °C14 A• at 60 °C14 A | power loss [W] / maximum | 3.2 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 A80 V 8 000 electrical endurance (operating cycles) / at A80 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 0.398 kg Current No • at 40 °C 15 A • at 40 °C 15 A • at 45 °C 15 A • at 50 °C 14 A • at 50 °C 14 A • at 60 °C 14 A | | 3.2 W |
| electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at 600 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 0.398 kg Current 15 A • at 40 °C 15 A • at 45 °C 15 A • at 50 °C 14 A • at 60 °C 14 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 0.398 kg Current Image: Current • at 40 °C 15 A • at 40 °C 15 A • at 45 °C 14 A • at 55 °C 14 A • at 60 °C 14 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 No ground-fault monitoring version without product function ordnewsian • communication function No • other measurement function No Net Weight 0.398 kg Current marking / according to UL 489 / 100%-rated breaker No 15 A • at 40 °C 15 A • at 45 °C 15 A • at 55 °C 14 A • at 60 °C 14 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 0.398 kg Current Mo marking / according to UL 489 / 100%-rated breaker No operational current 15 A • at 40 °C 15 A • at 45 °C 15 A • at 50 °C 14 A • at 55 °C 14 A • at 60 °C 14 A | electrical endurance (operating cycles) / at 480 V | 8 000 |
| / short-circuit and overload proof | electrical endurance (operating cycles) / at 600 V | 4 000 |
| product function No • communication function No • other measurement function No Net Weight 0.398 kg Current Imarking / according to UL 489 / 100%-rated breaker Marking / according to UL 489 / 100%-rated breaker No operational current Imarking / according to UL 489 / 100%-rated breaker • at 40 °C 15 A • at 45 °C 15 A • at 50 °C 14 A • at 55 °C 14 A • at 60 °C 14 A | | No |
| • communication functionNo• other measurement functionNoNet Weight0.398 kgCurrentmarking / according to UL 489 / 100%-rated breakerMarking / according to UL 489 / 100%-rated breakerNooperational current15 A• at 40 °C15 A• at 45 °C15 A• at 55 °C14 A• at 60 °C14 A | ground-fault monitoring version | without |
| • other measurement functionNoNet Weight0.398 kgCurrentmarking / according to UL 489 / 100%-rated breakeroperational currentNo• at 40 °C15 A• at 40 °C15 A• at 50 °C14 A• at 55 °C14 A• at 60 °C14 A | product function | |
| Net Weight0.398 kgCurrentNomarking / according to UL 489 / 100%-rated breakerNooperational current15 A• at 40 °C15 A• at 45 °C15 A• at 50 °C14 A• at 55 °C14 A• at 60 °C14 A | communication function | No |
| Current No marking / according to UL 489 / 100%-rated breaker No operational current 15 A • at 40 °C 15 A • at 45 °C 15 A • at 50 °C 14 A • at 55 °C 14 A • at 60 °C 14 A | other measurement function | No |
| marking / according to UL 489 / 100%-rated breakerNooperational current | Net Weight | 0.398 kg |
| operational current 15 A • at 40 °C 15 A • at 45 °C 15 A • at 50 °C 14 A • at 55 °C 14 A • at 60 °C 14 A | Current | |
| • at 40 °C 15 A • at 45 °C 15 A • at 50 °C 14 A • at 55 °C 14 A • at 60 °C 14 A | marking / according to UL 489 / 100%-rated breaker | No |
| • at 45 °C 15 A • at 50 °C 14 A • at 55 °C 14 A • at 60 °C 14 A | operational current | |
| • at 50 °C 14 A • at 55 °C 14 A • at 60 °C 14 A | ● at 40 °C | 15 A |
| • at 55 °C 14 A • at 60 °C 14 A | ● at 45 °C | 15 A |
| • at 60 °C 14 A | ● at 50 °C | 14 A |
| | ● at 55 °C | 14 A |
| • at 65 °C 14 A | ● at 60 °C | 14 A |
| | ● at 65 °C | 14 A |
| • at 70 °C 14 A | ● at 70 °C | 14 A |

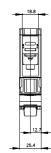
| Switching capacity according to IEC 60947 | |
|--|--|
| switching capacity class of the circuit breaker | S |
| design of short-circuit protection | For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last 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 | 15 A |
| • maximum | 15 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 | 300 A |
| maximum | 300 A |
| adjustable setting current (InN) / for N-tripping | 0.4 |
| • minimum | 0 A 0 A |
| maximum adjustable current response value current / of the current- dependent overload release | 15 15 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 |
| type of connectable conductor cross-sections / of the round conductor terminal / stranded | 1 x (14 AWG - 8 AWG) |
| width | 25.4 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 | circular conductor terminal on both sides |
| 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 | Yes |
| vessels) / supplement SB | |
| General Product Approval | |

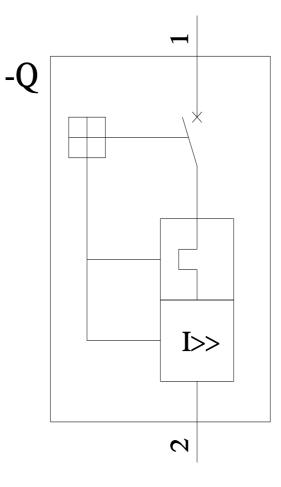








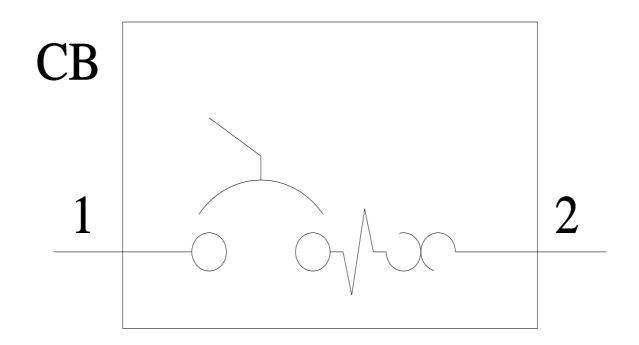




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Mouser Electronics

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