



circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 480 V 2-pole, line protection TM210, FTFM, In=80A overload protection Ir=80A fixed short-circuit protection li=10 x In UL489 SB (naval), 50 deg. cel. nut keeper kit on both sides

| Model | |
|--|-----------------------------|
| product brand name | SENTRON |
| product designation | Molded-case circuit breaker |
| product designation / according to UL file | SEAM |
| Product version | 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 |
| 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 | 2 |
| General technical data | |
| operating voltage / at AC / rated value | 415 V |
| power loss [W] / maximum | 12.86 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 6.43 W |
| mechanical service life (switching cycles) / typical | 20 000 |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz | 8 000 |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz | 4 000 |
| electrical endurance (switching cycles) / at 480 V | 8 000 |
| electrical endurance (switching cycles) / at 600 V | 4 000 |
| Neutral conductors / upgradeable/retrofitable | No |
| 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 | 80 A |
| • at 45 °C | 78 A |
| • at 50 °C | 77 A |
| • at 55 °C | 76 A |
| • at 60 °C | 74 A |

| | | |
|--|--|--------------------------|
| <ul style="list-style-type: none"> at 65 °C at 70 °C | 73 A 72 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 | | |
| breaking capacity current | | |
| <ul style="list-style-type: none"> at 240 V at 480 V at 600 Y/347 V | 65 kA 25 kA 14 kA | |
| Adjustable parameters | | |
| Adjustable response value current / I _g min. | 80 A | |
| Adjustable response value current / I _g min. | 80 A | |
| Ground fault protection / tripping switchable / I _{2t} =ON/OFF | No | |
| Mechanical Design | | |
| 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-section, connection screw, width x thickness , min. | 12 x 1 mm | |
| Type of connectable conductor cross-section, connection screw, width x thickness , max. | 17 x 6.5 mm | |
| Auxiliary circuit | | |
| product component | | |
| <ul style="list-style-type: none"> undervoltage release voltage trigger trip indicator | No No No | |
| 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 | | |
| <ul style="list-style-type: none"> during operation / minimum during operation / maximum during storage / minimum during storage / maximum | -25 °C 70 °C -40 °C 80 °C | |
| Certificates | | |
| certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB | Yes | |
| General Product Approval | EMC | Marine / Shipping |

[Confirmation](#)



other

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalog>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3VA5180-4ED22-1AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5180-4ED22-1AA0>

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

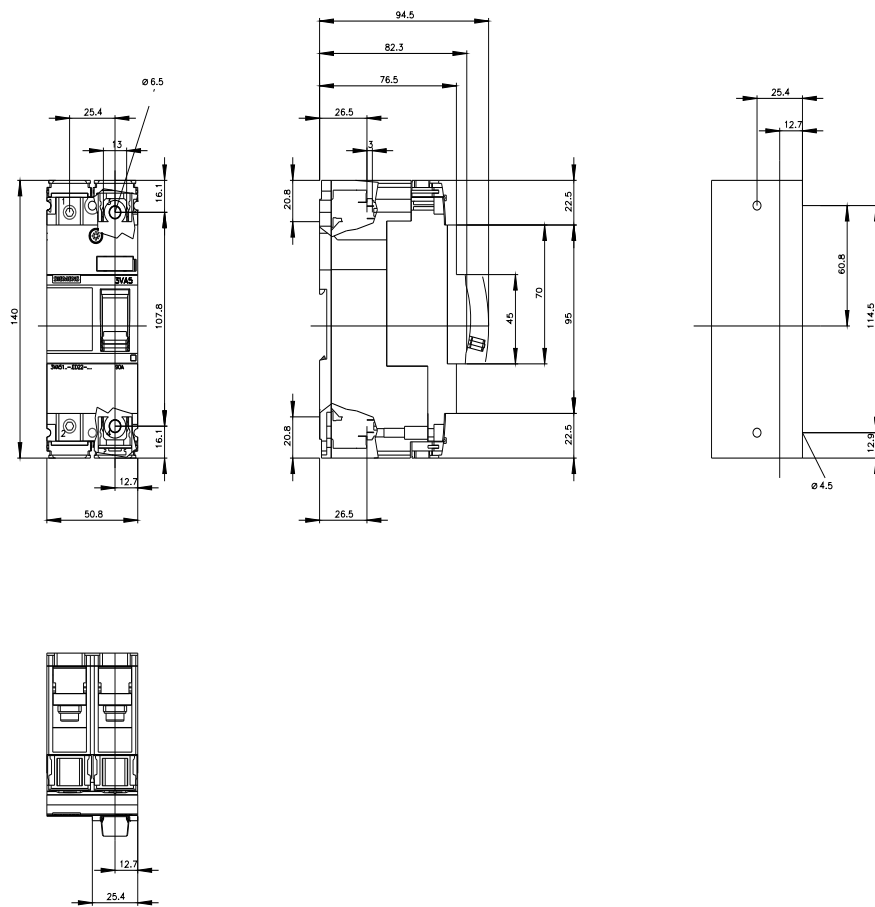
http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA5180-4ED22-1AA0

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>





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