



circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 480 V 3-pole, line protection TM210, FTFM,  $I_n=15A$  overload protection  $I_r=15A$  fixed short-circuit protection  $I_i=20 \times I_n$  UL489 SB (naval), 50 deg. cel. cable connection on both sides

### Model

|                                                                                                                            |                             |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                                                         | SETRON                      |
| 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)                      | 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                                                                             | LI                          |
| number of poles                                                                                                            | 3                           |

### General technical data

|                                                                                                |          |
|------------------------------------------------------------------------------------------------|----------|
| operating voltage / at AC / rated value                                                        | 690 V    |
| power loss [W] / maximum                                                                       | 10.6 W   |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 3.53 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                                                                                     | 0.934 kg |

### Current

|                                                    |      |
|----------------------------------------------------|------|
| marking / according to UL 489 / 100%-rated breaker | No   |
| operational 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 |
| • at 65 °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**

|                           |       |
|---------------------------|-------|
| breaking capacity current |       |
| • at 240 V                | 65 kA |
| • at 480 V                | 25 kA |
| • at 600 Y/347 V          | 14 kA |

**Adjustable parameters**

|                                                                                                                               |                                           |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| product feature / for L-tripping / selectable characteristic function                                                         | No                                        |
| type of value list setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic                   | Fest                                      |
| reference value setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic                      | x I <sub>n</sub>                          |
| set values setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic                           | 1                                         |
| adjustable response factor setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic / minimum | 1                                         |
| adjustable response factor setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic / maximum | 1                                         |
| adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic / minimum   | 15 A                                      |
| adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic / maximum   | 15 A                                      |
| type of value list delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic                        | Fest                                      |
| reference value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic                           | s                                         |
| set values delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic                                | 1                                         |
| adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic / minimum       | 1 s                                       |
| adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic / maximum       | 1 s                                       |
| product feature / for S-tripping / independent of direction / selectable characteristic function                              | No                                        |
| product feature / for I-tripping / can be switched on/off                                                                     | No                                        |
| design of I-trip / adjustable                                                                                                 | No                                        |
| reference value setting current (I <sub>i</sub> ) / for I-tripping                                                            | x I <sub>n</sub>                          |
| set values setting current (I <sub>i</sub> ) / for I-tripping                                                                 | 20                                        |
| adjustable response factor setting current (I <sub>i</sub> ) / for I-tripping / minimum                                       | 20                                        |
| adjustable response factor setting current (I <sub>i</sub> ) / for I-tripping / maximum                                       | 20                                        |
| adjustable response value setting current (I <sub>i</sub> ) / for I-tripping / minimum                                        | 300 A                                     |
| adjustable response value setting current (I <sub>i</sub> ) / for I-tripping / maximum                                        | 300 A                                     |
| product feature / for G-tripping / selectable characteristic function                                                         | No                                        |
| product feature / with neutral conductor protection / can be switched on/off                                                  | No                                        |
| product feature / with neutral conductor protection / adjustable                                                              | Yes                                       |
| type of value list setting current (I <sub>nN</sub> ) / for N-tripping                                                        | St                                        |
| reference value setting current (I <sub>nN</sub> ) / for N-tripping                                                           | x I <sub>n</sub>                          |
| adjustable absolute value setting current (I <sub>nN</sub> ) / for N-tripping / minimum                                       | 0 A                                       |
| adjustable absolute value setting current (I <sub>nN</sub> ) / for N-tripping / maximum                                       | 0 A                                       |
| tripping characteristic / of the lower tolerance band                                                                         | AK_3VA5_1_15A_TM2_SuMuH_uT                |
| tripping characteristic / of the upper tolerance band                                                                         | AK_3VA5_1_15A_TM2_SuMuH_oT                |
| let-through energy characteristic / at 240 V                                                                                  | DE_3VA5_1_15A_TM_line u starter_3u4p_240V |
| let-through energy characteristic / at 415 V                                                                                  | DE_3VA5_1_15A_TM_line u starter_3u4p_415V |
| let-through energy characteristic / at 690 V                                                                                  | DE_3VA5_1_15A_TM_line u starter_3u4p_690V |

|                                                                                                          |                                           |
|----------------------------------------------------------------------------------------------------------|-------------------------------------------|
| type of value list setting current (li) / for I-tripping                                                 | Fest                                      |
| tripping characteristic / of the let-through current characteristic / at 240 V                           | DS_3VA5_1_15A_TM_line u starter_3u4p_240V |
| tripping characteristic / of the let-through current characteristic / at 415 V                           | DS_3VA5_1_15A_TM_line u starter_3u4p_415V |
| tripping characteristic / of the let-through current characteristic / at 690 V                           | DS_3VA5_1_15A_TM_line u starter_3u4p_690V |
| Adjustable response value current / Ig min.                                                              | 15 A                                      |
| adjustable current response value current / of the current-dependent overload release / full-scale value | 15 A                                      |
| Ground fault protection / tripping switchable / I2t=ON/OFF                                               | No                                        |

#### Mechanical Design

|                                                                                 |                      |
|---------------------------------------------------------------------------------|----------------------|
| product component                                                               |                      |
| • undervoltage release                                                          | No                   |
| • voltage trigger                                                               | No                   |
| • trip indicator                                                                | No                   |
| height [in]                                                                     | 5.51 in              |
| Height                                                                          | 140 mm               |
| width [in]                                                                      | 3 in                 |
| Type of connectable conductor cross-section, round conductor terminal, stranded | 1 x (14 AWG - 8 AWG) |
| Width                                                                           | 76.2 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 | Yes |
|--------------------------------------------|-----|

#### 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](#)

| EMC | Declaration of Conformity | Marine / Shipping |
|-----|---------------------------|-------------------|
|-----|---------------------------|-------------------|



| Marine / Shipping | other |
|-------------------|-------|
|-------------------|-------|

## Further information

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=3VA5195-4ED36-1AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5195-4ED36-1AA0>

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

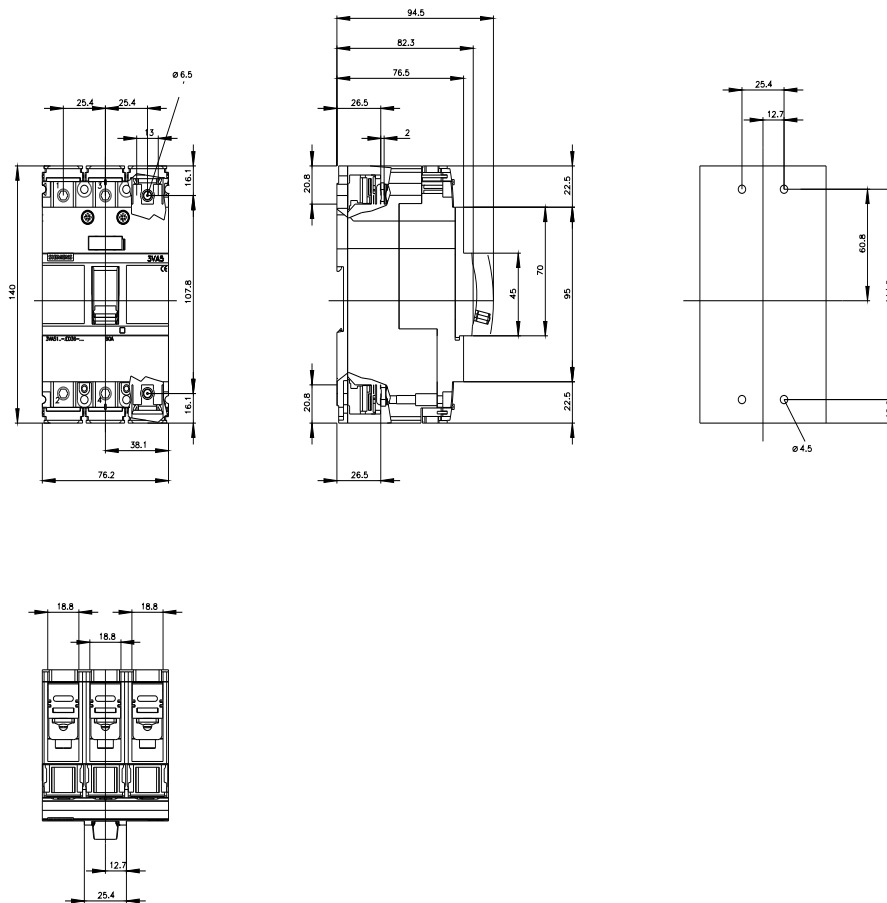
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5195-4ED36-1AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5195-4ED36-1AA0)

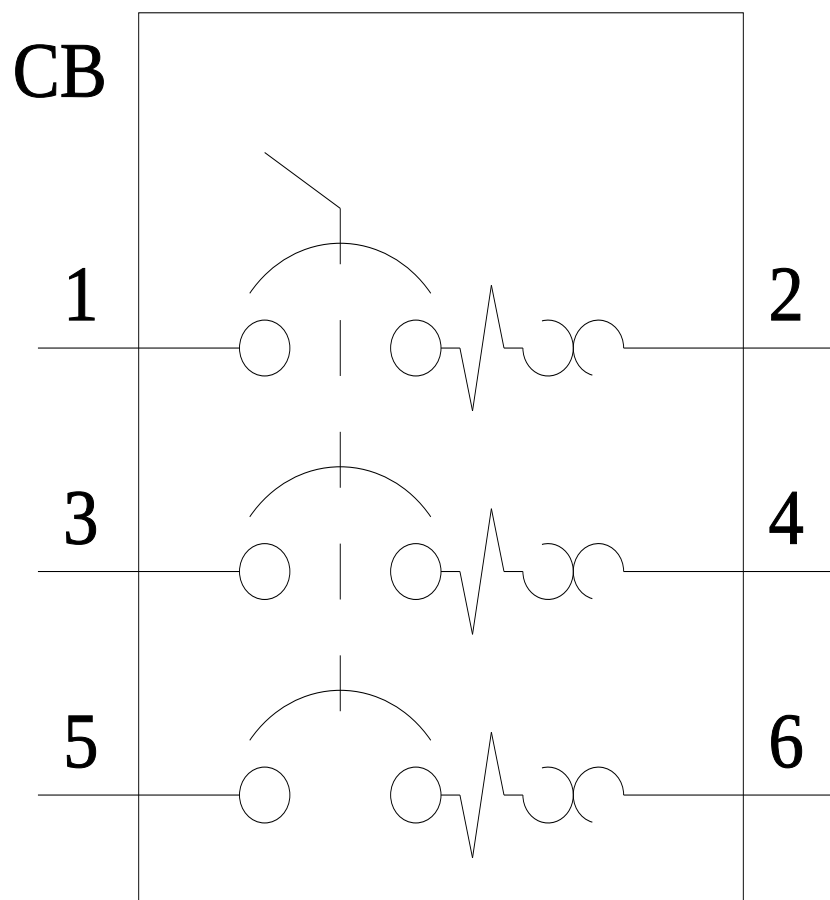
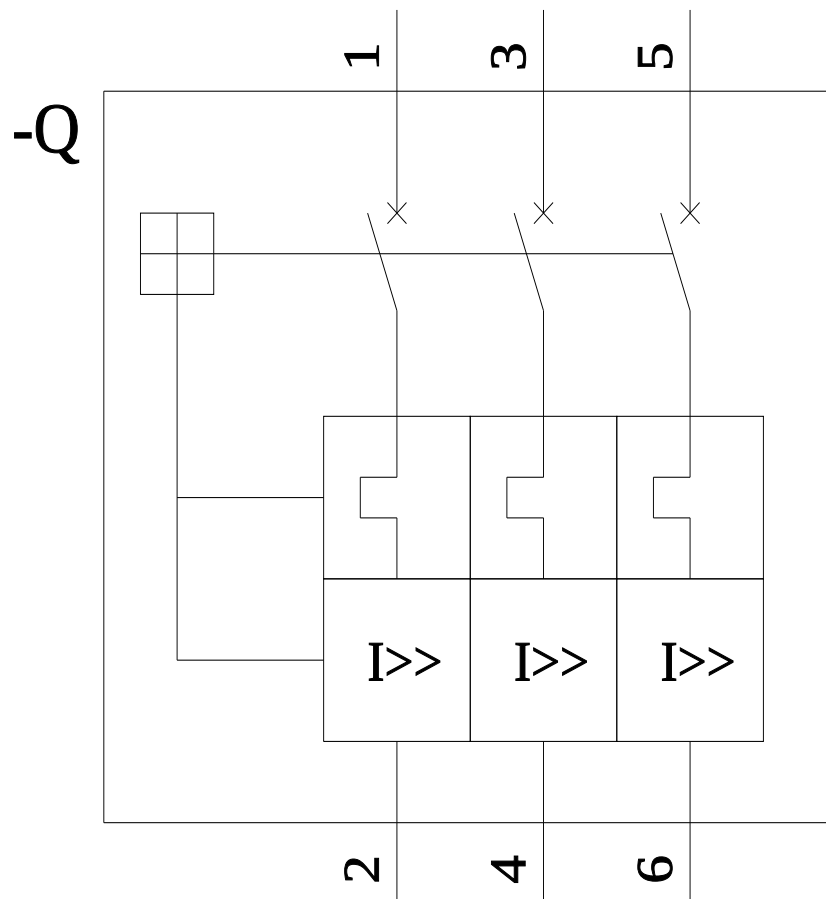
CAX-Online-Generator

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

Tender specifications

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





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