



circuit breaker 3VA4 UL Frame 125 breaking capacity class S 25 kA @ 480 V 2-pole, line protection TM210, FTFM,  $I_n=35$  A overload protection  $I_r=35$  A permanently set short-circuit protection  $I_i=10 \times I_n$  terminal connection

| Model                                                                                                                      |                             |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                                                         | SETRON                      |
| product designation                                                                                                        | Molded-case circuit breaker |
| product designation / according to UL file                                                                                 | SEAB                        |
| 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)                      | Yes                         |
| 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                                                                                    | 480 V                       |
| power loss [W] / maximum                                                                                                   | 6.5 W                       |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                                | 3.25 W                      |
| mechanical service life (operating cycles) / typical                                                                       | 15 000                      |
| electrical endurance (operating cycles) / at 480 V                                                                         | 8 000                       |
| electrical endurance (operating cycles) / at 600 V                                                                         | 4 000                       |
| product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof                      | No                          |
| ground-fault monitoring version                                                                                            | Without                     |
| product function                                                                                                           |                             |
| • communication function                                                                                                   | No                          |
| • other measurement function                                                                                               | No                          |
| Net Weight                                                                                                                 | 0.514 kg                    |
| Current                                                                                                                    |                             |
| marking / according to UL 489 / 100%-rated breaker                                                                         | No                          |
| operational current                                                                                                        |                             |
| • at 40 °C                                                                                                                 | 35 A                        |
| • at 45 °C                                                                                                                 | 34 A                        |
| • at 50 °C                                                                                                                 | 33 A                        |
| • at 55 °C                                                                                                                 | 33 A                        |
| • at 60 °C                                                                                                                 | 32 A                        |
| • at 65 °C                                                                                                                 | 31 A                        |
| • at 70 °C                                                                                                                 | 30 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 <ul style="list-style-type: none"><li>at 240 V</li><li>at 480 Y/277 V</li><li>at 480 V</li><li>at 600 Y/347 V</li></ul>                                                   | 65 kA<br>25 kA<br>25 kA<br>14 kA                                                                                                                               |       |
| Adjustable parameters                                                                                                                                                                               |                                                                                                                                                                |       |
| adjustable response value delay time (tr) / for L-tripping / with I2t characteristic <ul style="list-style-type: none"><li>minimum</li><li>maximum</li></ul>                                        | 1 s<br>1 s                                                                                                                                                     |       |
| product function / grounding protection                                                                                                                                                             | No                                                                                                                                                             |       |
| Mechanical Design                                                                                                                                                                                   |                                                                                                                                                                |       |
| product component <ul style="list-style-type: none"><li>undervoltage release</li><li>voltage trigger</li><li>trip indicator</li></ul>                                                               | No<br>No<br>No                                                                                                                                                 |       |
| height [in]                                                                                                                                                                                         | 5.09 in                                                                                                                                                        |       |
| height                                                                                                                                                                                              | 129.4 mm                                                                                                                                                       |       |
| width [in]                                                                                                                                                                                          | 2 in                                                                                                                                                           |       |
| type of connectable conductor cross-sections / of the round conductor terminal / stranded                                                                                                           | 1 x (14 AWG - 8 AWG)                                                                                                                                           |       |
| width                                                                                                                                                                                               | 50.8 mm                                                                                                                                                        |       |
| depth [in]                                                                                                                                                                                          | 2.96 in                                                                                                                                                        |       |
| depth                                                                                                                                                                                               | 75.1 mm                                                                                                                                                        |       |
| Connections                                                                                                                                                                                         |                                                                                                                                                                |       |
| arrangement of electrical connectors / for main current circuit                                                                                                                                     | output side: circular conductor connection                                                                                                                     |       |
| type of electrical connection / for main current circuit                                                                                                                                            | Infeed side: Low tab                                                                                                                                           |       |
| design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)                                                                                                               | Tin                                                                                                                                                            |       |
| 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 <ul style="list-style-type: none"><li>during operation / minimum</li><li>during operation / maximum</li><li>during storage / minimum</li><li>during storage / maximum</li></ul> | -25 °C<br>70 °C<br>-40 °C<br>80 °C                                                                                                                             |       |
| Approvals / Certificates                                                                                                                                                                            |                                                                                                                                                                |       |
| General Product Approval                                                                                                                                                                            | EMV                                                                                                                                                            | other |



[Miscellaneous](#)



[Confirmation](#)

[Miscellaneous](#)

## Environment

[Environmental Con-  
firmations](#)

## Further information

### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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

<https://www.siemens.com/lowvoltage/catalogs>

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA4135-4ED24-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA4135-4ED24-0AA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA4135-4ED24-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4135-4ED24-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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





