



circuit breaker 3VA4 UL Frame 125 breaking capacity class H 65 kA @ 277 V 1-pole, line protection TM210, FTFM,  $I_n=25$  A overload protection  $I_r=25$  A permanently set short-circuit protection  $I_i=12 \times I_n$

| Model  |                             |
|--|-----------------------------|
| product brand name   | SENTRON                     |
| product designation  | Molded-case circuit breaker |
| product designation / according to UL file   | HEAB                        |
| 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  | 1                           |
| General technical data   |                             |
| operating voltage / at AC / rated value  | 480 V                       |
| power loss [W] / maximum   | 2.7 W                       |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                                | 2.7 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   | 0.28 kg                     |
| Current  |                             |
| marking / according to UL 489 / 100%-rated breaker   | No                          |
| operational current  |                             |
| • at 40 °C   | 25 A                        |
| • at 45 °C   | 24 A                        |
| • at 50 °C   | 24 A                        |
| • at 55 °C   | 23 A                        |
| • at 60 °C   | 23 A                        |
| • at 65 °C   | 22 A                        |
| • at 70 °C   | 21 A                        |
| Switching capacity according to IEC 60947  |                             |

|   |  |
|---|--|
| switching capacity class of the circuit breaker   | H  |
| 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 |
| <b>Switching capacity according to UL 489</b>   |  |
| current breaking capacity   |  |
| • at 120 V  | 150 kA   |
| • at 277 V  | 65 kA  |
| • at 347 V  | 25 kA  |
| <b>Adjustable parameters</b>  |  |
| adjustable response value delay time (tr) / for L-tripping / with I2t characteristic  |  |
| • minimum   | 1 s  |
| • maximum   | 1 s  |
| product function / grounding protection   | No   |
| <b>Mechanical Design</b>  |  |
| product component   |  |
| • undervoltage release  | No   |
| • voltage trigger   | No   |
| • trip indicator  | No   |
| height [in]   | 5.09 in  |
| height  | 129.4 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]  | 2.96 in  |
| depth   | 75.1 mm  |
| <b>Connections</b>  |  |
| 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  |
| <b>Auxiliary circuit</b>  |  |
| number of CO contacts / for auxiliary contacts  | 0  |
| <b>Accessories</b>  |  |
| product extension / optional / motor drive  | No   |
| <b>Environmental conditions</b>   |  |
| 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  |
| <b>Further information</b>  |  |
| <b>Information on the packaging</b><br><a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a>  |  |
| <b>Information for data generation and storage</b><br><a href="https://support.industry.siemens.com/cs/ww/en/view/109995012">https://support.industry.siemens.com/cs/ww/en/view/109995012</a>   |  |
| <b>Information- and Downloadcenter (Catalogs, Brochures,...)</b><br><a href="https://www.siemens.com/lowvoltage/catalogs">https://www.siemens.com/lowvoltage/catalogs</a>   |  |
| <b>Industry Mall (Online ordering system)</b><br><a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA4125-6ED14-3AA0">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA4125-6ED14-3AA0</a>  |  |
| <b>Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)</b><br><a href="https://support.industry.siemens.com/cs/ww/en/ps/3VA4125-6ED14-3AA0">https://support.industry.siemens.com/cs/ww/en/ps/3VA4125-6ED14-3AA0</a>  |  |
| <b>Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)</b><br><a href="https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4125-6ED14-3AA0">https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4125-6ED14-3AA0</a> |  |
| <b>CAX-Online-Generator</b><br><a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>  |  |
| <b>Tender specifications</b><br><a href="https://www.siemens.com/specifications">https://www.siemens.com/specifications</a>   |  |
| <b>Characteristic curves</b><br><a haupt"&gt;&lt;="" href="https://curves.simaris.siemens.com/curves/&lt;mmp_prod_noCOMP=" mmp_prod_no&gt;"="">https://curves.simaris.siemens.com/curves/&lt;mmp_prod_noCOMP="HAUPT"&gt;&lt;/mmp_prod_no&gt;</a>                                    |  |



