



circuit breaker 3VA4 UL Frame 125 breaking capacity class S 25 kA @ 480 V 2-pole, line protection TM210, FTFM, In=45 A overload protection Ir=45 A permanently set short-circuit protection Ii=10 x In

| Model  |  |
|--|--|
| product brand name   | SENTRON  |
| 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  | 415 V  |
| power loss [W] / maximum   | 7 W  |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                                | 3.5 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   | 45 A   |
| • at 45 °C   | 44 A   |
| • at 50 °C   | 43 A   |
| • at 55 °C   | 43 A   |
| • at 60 °C   | 42 A   |
| • at 65 °C   | 41 A   |
| • at 70 °C   | 40 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 240 V                | 65 kA |
| • at 480 Y/277 V          | 25 kA |
| • at 480 V                | 25 kA |
| • at 600 Y/347 V          | 14 kA |

### Adjustable parameters

|  |     |
|--|-----|
| adjustable response value delay time (tr) / for L-tripping / with I2t characteristic |     |
| • minimum  | 1 s |
| • maximum  | 1 s |

|   |    |
|---|----|
| product function / grounding protection | No |
|---|----|

### Mechanical Design

|   |                   |
|---|-------------------|
| product component   |                   |
| • undervoltage release  | No                |
| • voltage trigger   | No                |
| • trip indicator  | 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 (8 AWG - 3/0) |
| 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                |        |
| • during operation / minimum       | -25 °C |
| • during operation / maximum       | 70 °C  |
| • during storage / minimum         | -40 °C |
| • during storage / maximum         | 80 °C  |

### Approvals / Certificates

|                          |     |       |
|--------------------------|-----|-------|
| General Product Approval | EMV | other |
|--------------------------|-----|-------|

[Miscellaneous](#)



[Confirmation](#)

[Miscellaneous](#)

[Miscellaneous](#)

### Further information

#### Information on the packaging

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

#### 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=3VA4145-4ED24-3AA0>

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

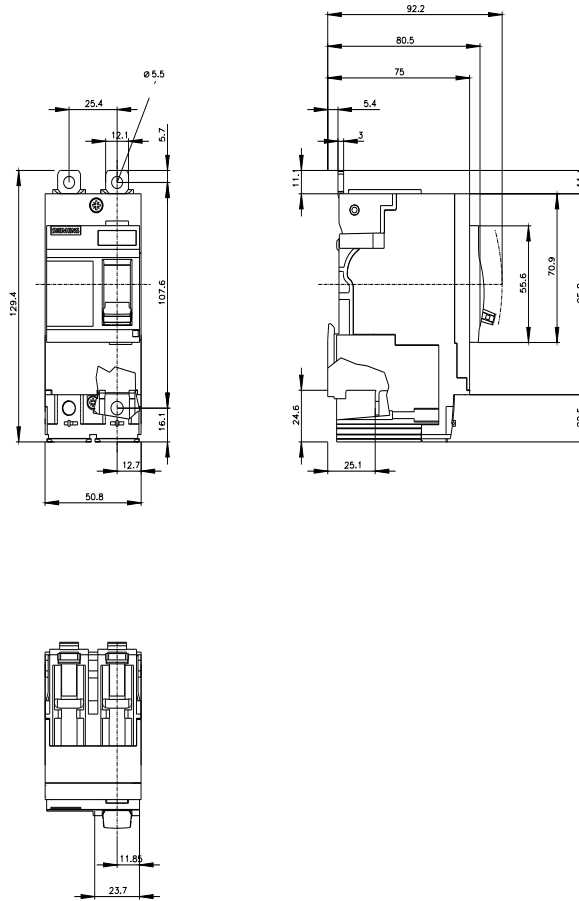
<https://support.industry.siemens.com/cs/ww/en/ps/3VA4145-4ED24-3AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA4145-4ED24-3AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA4145-4ED24-3AA0)

#### CAX-Online-Generator

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



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