



circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 480 V 2-pole, line protection TM210, FTFM, In=35A overload protection Ir=35A fixed short-circuit protection li=10 x In nut keeper kit on both sides

| Model  |                             |
|--|-----------------------------|
| product brand name   | SENTRON                     |
| product designation  | Molded-case circuit breaker |
| product designation / according to UL file   | SEAS                        |
| 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)                                | No                          |
| design of the overcurrent release  | TM210                       |
| protection function of the overcurrent release   | LI                          |
| number of poles  | 2                           |
| General technical data   |                             |
| rated insulation voltage Ui  | 600 V                       |
| Max. rated operational voltage Ue with DC  | 250 V                       |
| operating voltage / at AC / rated value  | 415 V                       |
| power loss [W] / maximum   | 7.6 W                       |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole                             | 3.8 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   | 35 A                        |
| • at 45 °C   | 34 A                        |
| • at 50 °C   | 34 A                        |

|            |      |
|------------|------|
| • at 55 °C | 33 A |
| • at 60 °C | 33 A |
| • at 65 °C | 32 A |
| • at 70 °C | 32 A |

#### Switching capacity according to IEC 60947

|   |  |
|---|--|
| switching capacity class of the circuit breaker         | S  |
| breaking capacity maximum short-circuit current (Icu)   |  |
| • at 240 V  | 55 kA  |
| • at 415 V  | 36 kA  |
| breaking capacity operating short-circuit current (Ics) |  |
| • at 240 V  | 55 kA  |
| • at 415 V  | 36 kA  |
| short-circuit current making capacity (Icm)             |  |
| • at 240 V  | 121 kA   |
| • at 415 V  | 75.6 kA  |
| 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

|   |      |
|---|------|
| Adjustable response value current / I <sub>g</sub> min.                 | 35 A |
| Adjustable response value current / I <sub>g</sub> min.                 | 35 A |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =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                              |    |
| • undervoltage release                         | No |
| • voltage trigger                              | No |
| • trip indicator                               | 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                |        |
| • during operation / minimum       | -25 °C |
| • during operation / maximum       | 70 °C  |
| • during storage / minimum         | -40 °C |
| • during storage / maximum         | 80 °C  |

#### Certificates

|   |   |
|---|---|
| reference code / according to IEC 81346-2 | Q |
|---|---|

General Product Approval

EMC

Marine / Shipping

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=3VA5135-4ED22-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5135-4ED22-0AA0>

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

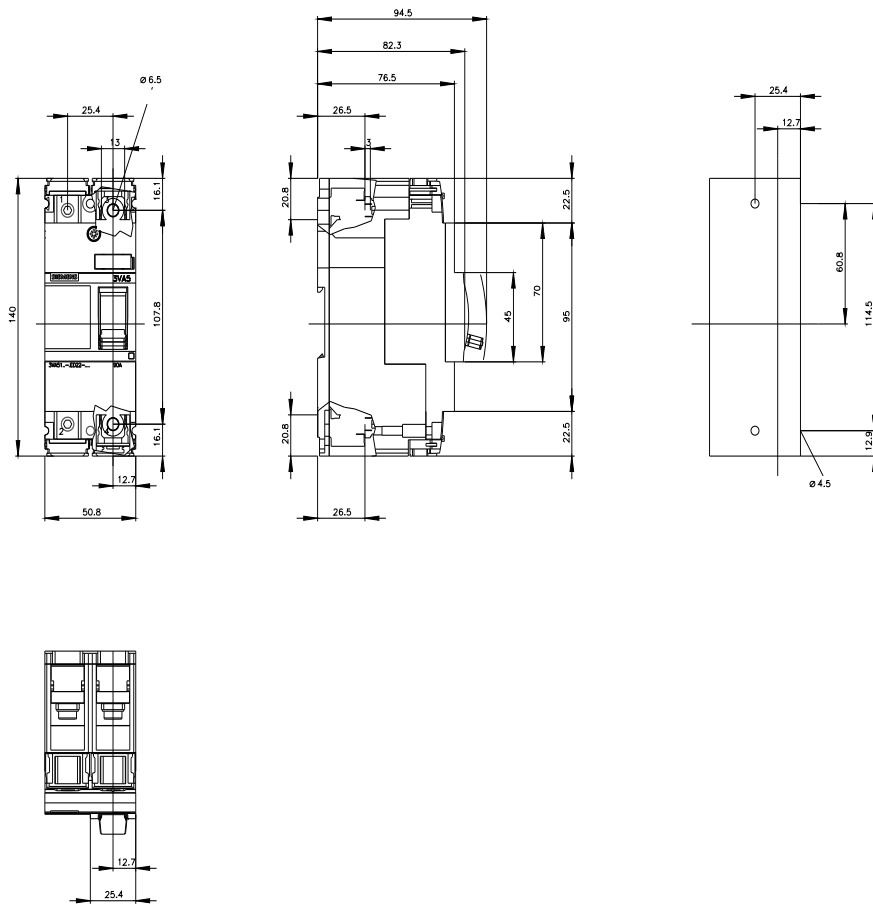
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3VA5135-4ED22-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA5135-4ED22-0AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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





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