

circuit breaker 3VA5 UL frame 125 breaking capacity class M 35kA @ 480V 3-pole, line protection TM210, FTFM, I<sub>n</sub>=100A overload protection I<sub>r</sub>=100A fixed short-circuit protection I<sub>i</sub>=10 x I<sub>n</sub> UL 489 SB (naval), 50° C without connection



| Model   |                             |
|---|-----------------------------|
| Product brand name  | SENTRON                     |
| Product designation   | Molded-case circuit breaker |
| Product designation / according to UL-File  | MEAM                        |
| Product version   | System protection           |
| Design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes                         |
| Design of the overcurrent release   | TM210                       |
| Protective function of the overcurrent release  | LI                          |
| Number of poles   | 3                           |
| General technical data  |                             |
| Power loss [W] / maximum  | 22.8 W                      |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole                        | 7.6 W                       |
| Latching - endurance  | 15 000                      |
| 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 / at 50/60 Hz      | 8 000   |
| Electrical endurance (switching cycles) / at 600 V / at 50/60 Hz      | 4 000   |
| Neutral conductors / upgradeable/retrofitable                         | No      |
| Ground fault monitoring version                                       | Without |
| Product function  |         |
| • communication function  | No      |
| • other measurement function  | No      |

### Electricity

|   |        |
|---|--------|
| Marking / acc. to UL 489 / 100%-rated breaker                     | No     |
| Max. rated operational voltage of the size of the circuit-breaker | 125 A  |
| Rated continuous current I <sub>u</sub>                           | 100 A  |
| Operating current   |        |
| • at 40 °C  | 100 A  |
| • at 45 °C  | 100 A  |
| • at 50 °C  | 100 A  |
| • at 55 °C  | 96.7 A |
| • at 60 °C  | 94.7 A |
| • at 65 °C  | 92.7 A |
| • at 70 °C  | 90.8 A |

### Switching capacity according to IEC 60947

|   |   |
|---|---|
| Switching capacity class of the circuit breaker | M   |
| Design of short-circuit protection              | For breaking capacity values in DC networks, see the 3VA Molded Case Circuit Breaker Manual; link available under Service & Support in the last chapter |

### Switching capacity according to UL 489

|                           |       |
|---------------------------|-------|
| Breaking capacity current |       |
| • at 240 V                | 85 kA |
| • at 480 V                | 35 kA |
| • at 600 Y/347 V          | 18 kA |

### Adjustable parameters

|   |    |
|---|----|
| Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF | No |
|---|----|

### Mechanical Design

|             |         |
|-------------|---------|
| Height [in] | 5.5 in  |
| Height      | 140 mm  |
| Width [in]  | 3 in    |
| Width       | 76.2 mm |

|            |         |
|------------|---------|
| Depth [in] | 3 in    |
| Depth      | 76.5 mm |

### Connections

|   |                    |
|---|--------------------|
| Arrangement of electrical connectors / for main current circuit | Without connection |
| Type of electrical connection / for main current circuit        | Without            |

### 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  |  |
| <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> | <ul style="list-style-type: none"> <li>-25 °C</li> <li>70 °C</li> <li>-40 °C</li> <li>80 °C</li> </ul> |

### Certificates

|  |     |
|--|-----|
| Reference code / acc. to DIN EN 81346-2  | Q   |
| Certificate of suitability / as approval for NAVAL (no combat vessels) / Supplement SB | Yes |

|                                 |            |                          |
|---------------------------------|------------|--------------------------|
| <b>General Product Approval</b> | <b>EMC</b> | <b>Test Certificates</b> |
|---------------------------------|------------|--------------------------|



[Miscellaneous](#)

|                          |              |
|--------------------------|--------------|
| <b>Shipping Approval</b> | <b>other</b> |
|--------------------------|--------------|



[Miscellaneous](#)

### 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=3VA5110-5ED31-1AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5110-5ED31-1AA0>

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

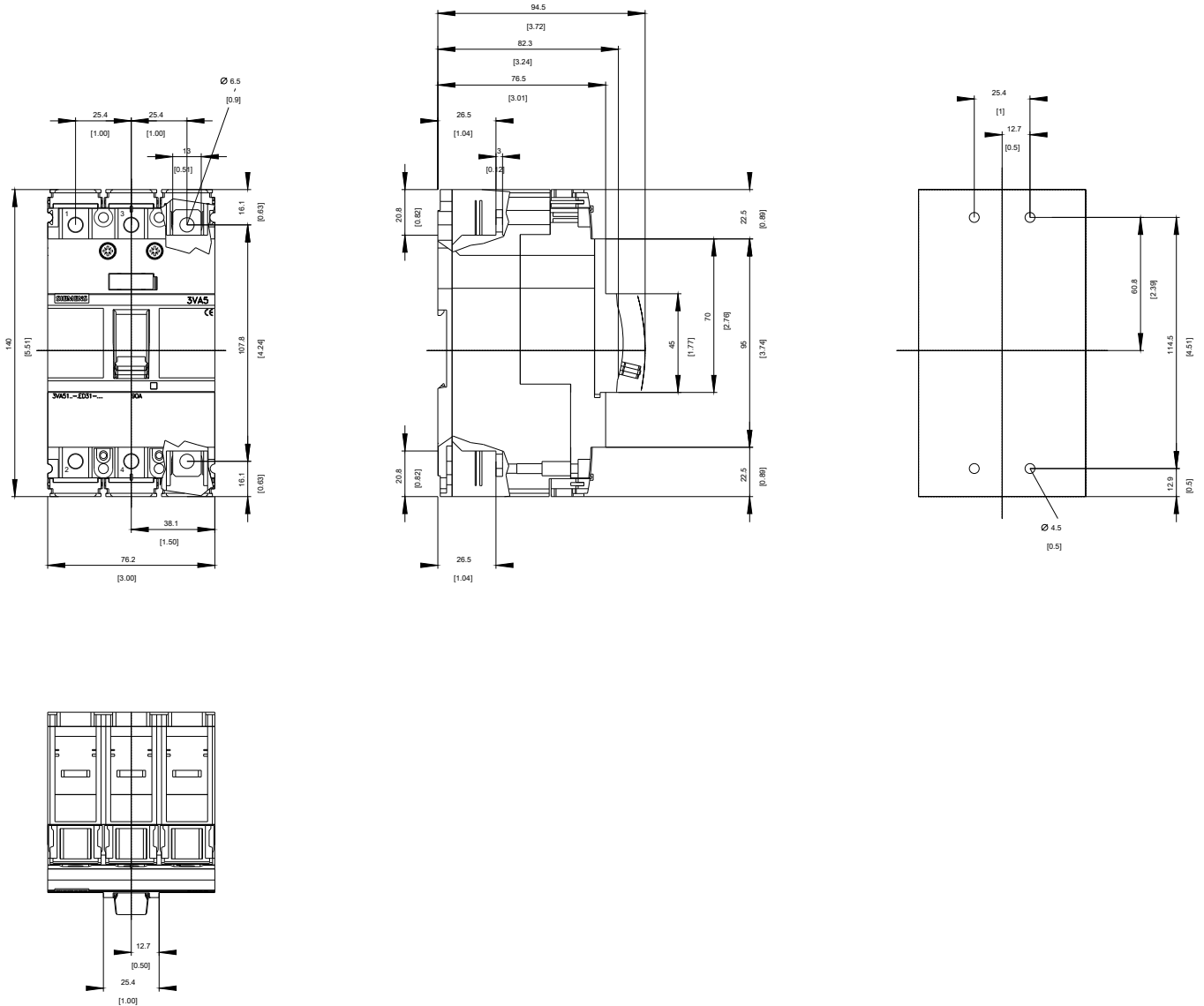
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5110-5ED31-1AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5110-5ED31-1AA0)

CAx-Online-Generator

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

Tender specifications

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



-Q



-CB

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