



CIRCUIT BREAKER 3VA5 UL FRAME 125 BREAKING CAPACITY CLASS M 35KA @ 480 V 3-POLE, LINE PROTECTION TM210, FTFM, IN=90A OVERLOAD PROTECTION IR=90A FIXED SHORT CIRCUIT PROTECTION II=10 X IN UL489 SB (NAVAL), 50 DEG CEL. W/O CONNECTION

| Model                                                                                                                |         |
|----------------------------------------------------------------------------------------------------------------------|---------|
| product brandname                                                                                                    | SENTRON |
| Type of load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes     |
| Number of poles                                                                                                      | 3       |
| General technical data                                                                                               |         |
| Active power loss / for rated value of the current / at AC / in hot operating state / per device                     | 21.3 W  |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole                       | 7.1 W   |
| Mechanical service life (switching cycles) / typical                                                                 | 15 000  |
| Electrical lifetime (switching cycles) / at 480 V / at 50/60 Hz                                                      | 8 000   |
| Electrical lifetime (switching cycles) / at 600 V / at 50/60 Hz                                                      | 4 000   |
| Neutral conductors / upgradeable/retrofitable                                                                        | No      |
| Product function                                                                                                     |         |
| • communication function                                                                                             | No      |

- other measurement function

No

## Electricity

|                                                                   |         |
|-------------------------------------------------------------------|---------|
| Marking / according to UL 489 / 100%-rated breaker                | No      |
| Max. rated operational voltage of the size of the circuit-breaker | 125 A   |
| Courant permanent assigné lu                                      | 90 A    |
| Operating current                                                 |         |
| • at 40 °C                                                        | 90 A    |
| • at 45 °C                                                        | 90 A    |
| • at 50 °C                                                        | 90 A    |
| • at 55 °C                                                        | 86.88 A |
| • at 60 °C                                                        | 84.92 A |
| • at 65 °C                                                        | 83.04 A |
| • at 70 °C                                                        | 81.24 A |

## 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

|                                                            |       |
|------------------------------------------------------------|-------|
| Adjustable response value current / Ig min.                | 90 A  |
| Adjustable response value current / Ig min.                | 90 A  |
| Adjustable response value current / li min.                | 900 A |
| Adjustable response value current / li max.                | 900 A |
| Ground fault protection / tripping switchable / I2t=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 |

## 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                |      |

- during operation / minimum -25 °C
- during operation / maximum 70 °C
- during storage / minimum -40 °C
- during storage / maximum 80 °C

## Certificates

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

| General Product Approval | EMC | Declaration of Conformity | other |
|--------------------------|-----|---------------------------|-------|
|--------------------------|-----|---------------------------|-------|



[sonstig](#)

## Further information

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

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

**Industry Mall (Online ordering system)**

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA5190-5ED31-1AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA5190-5ED31-1AA0/all>

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

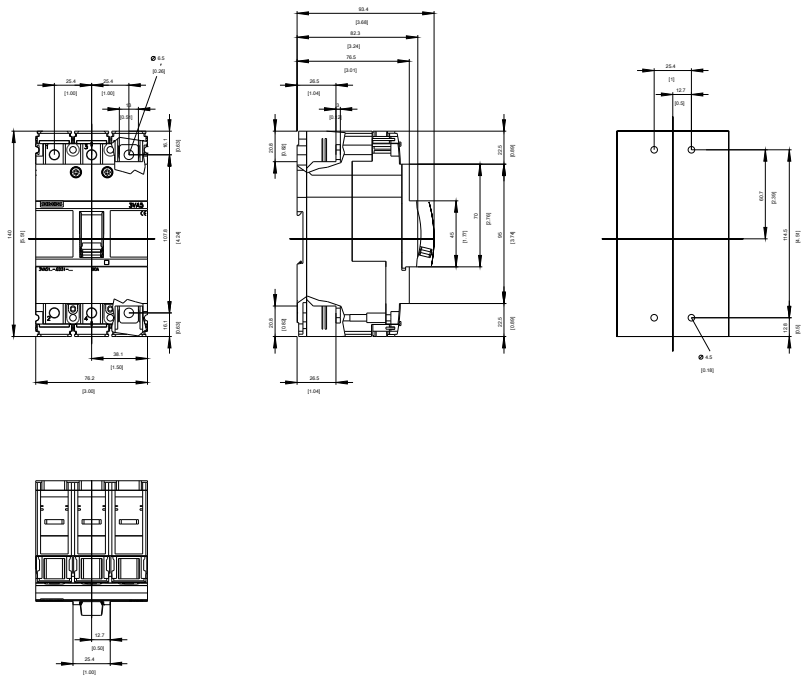
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5190-5ED31-1AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5190-5ED31-1AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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



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