

CIRCUIT BREAKER 3VA5 UL FRAME 125 BREAKING CAPACITY CLASS M 35KA @ 480V 3-POLE, LINE PROTECTION TM230, FTAM, IN=20A OVERLOAD PROTECTION IR=20A FIXED SHORT CIRCUIT PROTECTION II=5...10 X IN UL489 SB (NAVAL), 50 DEG CEL. W/O CONNECTION



| Model   |                             |
|---|-----------------------------|
| Product brand name  | SETRON                      |
| Product designation   | Molded-case circuit breaker |
| Design of the product   | 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   | TM230                       |
| Protective function of the overcurrent release  | LI                          |
| Number of poles   | 3                           |
| General technical data  |                             |
| Active power loss / for rated value of the current / at AC / in hot operating state / per device                      | 12.3 W                      |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole                        | 4.1 W                       |
| Mechanical service life (switching cycles) / typical  | 15 000                      |
| 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    |
| Courant permanent assigné lu                                      | 20 A     |
| Operating current   |          |
| • at 40 °C  | 20 A     |
| • at 45 °C  | 20 A     |
| • at 50 °C  | 20 A     |
| • at 55 °C  | 19 A     |
| • at 60 °C  | 19.14 A  |
| • at 65 °C  | 18.816 A |
| • at 70 °C  | 18.5 A   |

### Switching capacity according to IEC 60947

|   |   |
|---|---|
| Switching capacity class of the circuit breaker | M |
|---|---|

### 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 / lg min.                | 20 A  |
| Adjustable response value current / lg min.                | 20 A  |
| Adjustable response value current / li min.                | 150 A |
| Adjustable response value current / li max.                | 300 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 |

### 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

|  |     |
|--|-----|
| 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   | Shipping Approval   |
|---|---|---|---|
|    |  |  |  |

#### other

[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=3VA5120-5EC31-1AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5120-5EC31-1AA0>

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

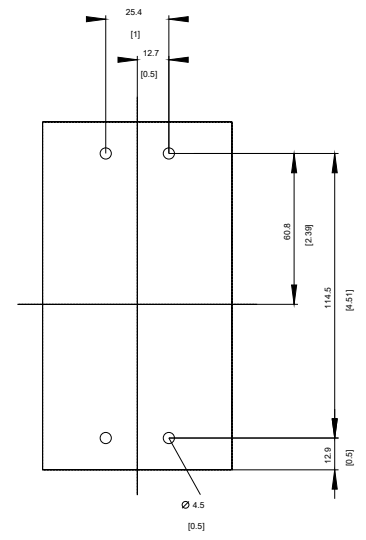
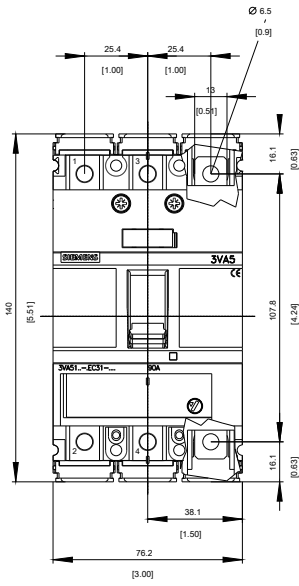
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5120-5EC31-1AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5120-5EC31-1AA0)

##### CAX-Online-Generator

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

##### Tender specifications

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



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