

circuit breaker 3VA5 UL frame 800 breaking capacity class C 100kA @ 480 V 3-pole, line protection TM230, FTAM, In=800A overload protection Ir=800A fixed short circuit protection li=5...10 x In



| Model   |                             |
|---|-----------------------------|
| Product brand name  | SENTRON                     |
| Product designation   | Molded-case circuit breaker |
| Product designation / according to UL file  | CMAS                        |
| 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   | TM230                       |
| Protective function of the overcurrent release  | LI                          |
| Number of poles   | 3                           |

| General technical data   |        |
|--|--------|
| Rated insulation voltage Ui  | 750 V  |
| Max. rated operational voltage Ue with AC 50/60Hz  | 600 V  |
| Max. rated operational voltage Ue with DC  | 500 V  |
| Power loss [W] / maximum   | 210 W  |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 70 W   |
| Mechanical service life (switching cycles) / typical   | 10 000 |

|   |         |
|---|---------|
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz | 5 800   |
| 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          | 5 800   |
| 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      |

### Current

|  |       |
|--|-------|
| Marking / acc. to UL 489 / 100%-rated breaker    | No    |
| Max. rated operational current of the frame size | 800 A |
| Rated continuous current I <sub>u</sub>          | 800 A |

### Switching capacity according to IEC 60947

|  |  |
|--|--|
| Switching capacity class of the circuit breaker                        | C  |
| Maximum short-circuit current breaking capacity (I <sub>cu</sub> )     |  |
| • at 240 V   | 200 kA   |
| • at 415 V   | 110 kA   |
| • at 690 V   | 35 kA  |
| Operational short-circuit current breaking capacity (I <sub>cs</sub> ) |  |
| • at 240 V   | 150 kA   |
| • at 415 V   | 85 kA  |
| • at 690 V   | 19 kA  |
| Short-circuit current making capacity (I <sub>cm</sub> )               |  |
| • at 240 V   | 440 kA   |
| • at 415 V   | 242 kA   |
| • at 690 V   | 74 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                | 200 kA |
| • at 480 V                | 100 kA |
| • at 600 V                | 50 kA  |

### Adjustable parameters

|   |       |
|---|-------|
| Adjustable response value current / I <sub>r</sub> min. | 800 A |
|---|-------|

|   |         |
|---|---------|
| Adjustable response value current / I <sub>r</sub> max.                 | 800 A   |
| Adjustable response value current / I <sub>i</sub> min.                 | 4 000 A |
| Adjustable response value current / I <sub>i</sub> max.                 | 8 000 A |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF | No      |

### Mechanical Design

|             |         |
|-------------|---------|
| Height [in] | 12.6 in |
| Height      | 328 mm  |
| Width [in]  | 8.3 in  |
| Width       | 210 mm  |
| Depth [in]  | 4.7 in  |
| Depth       | 120 mm  |

### Connections

|   |                  |
|---|------------------|
| Arrangement of electrical connectors / for main current circuit | Front connection |
|---|------------------|

### Auxiliary circuit

|  |   |
|--|---|
| Number of CO contacts / for auxiliary contacts | 0 |
|--|---|

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

### 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=3VA5580-7EC32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5580-7EC32-0AA0>

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

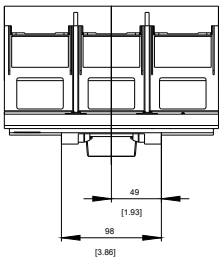
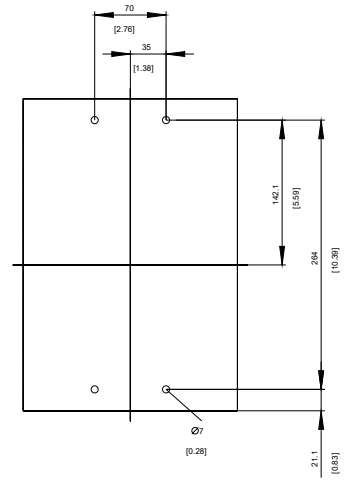
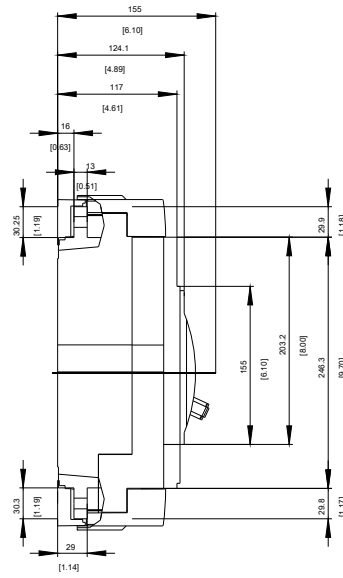
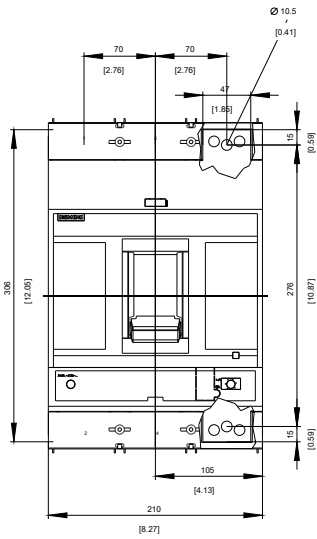
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5580-7EC32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5580-7EC32-0AA0)

#### CAX-Online-Generator

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

#### Tender specifications

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



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