



circuit breaker 3VA6 UL frame 250 breaking capacity class C 100kA @ 480V 3-pole, line protection ETU550, LSI, In=100A overload protection Ir=40A...100A short-circuit protection Isd=0.6..10x In, li=1.5..12x In N conductor protection optionally with external current transformer, up to 160% without connection

| Model   |                             |
|---|-----------------------------|
| product brand name  | SETRON                      |
| product designation   | Molded-case circuit breaker |
| product designation / according to UL file  | CFAE-Y                      |
| 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   | ETU550                      |
| protection function of the overcurrent release  | LSI                         |
| number of poles   | 3                           |
| General technical data  |                             |
| Tension assignée d'isolement Ui   | 600 V                       |
| power loss [W] / maximum  | 6.7 W                       |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole                        | 2.23 W                      |
| mechanical service life (operating cycles) / typical  | 20 000                      |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz   | 6 000                       |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz   | 3 000                       |
| electrical endurance (switching cycles) / at 480 V  | 6 000                       |
| electrical endurance (switching cycles) / at 600 V  | 7 500                       |
| Neutral conductors / upgradeable/retrofitable   | Yes                         |
| ground-fault monitoring version   | Without                     |
| product function  |                             |
| • communication function  | Yes                         |
| • other measurement function  | No                          |
| Current   |                             |
| marking / acc. to UL 489 / 100%-rated breaker   | No                          |
| operational current   |                             |
| • at 55 °C  | 100 A                       |
| • at 60 °C  | 100 A                       |
| • at 65 °C  | 100 A                       |
| • at 70 °C  | 100 A                       |
| Switching capacity according to IEC 60947   |                             |
| switching capacity class of the circuit breaker   | C                           |
| breaking capacity maximum short-circuit current (Icu)   |                             |
| • at 240 V  | 150 kA                      |

|  |                            |
|--|----------------------------|
| <ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 690 V</li> </ul>   | 110 kA<br>3 kA             |
| breaking capacity operating short-circuit current (Ics) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul> | 150 kA<br>110 kA<br>3 kA   |
| short-circuit current making capacity (Icm) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>             | 330 kA<br>242 kA<br>4.5 kA |

#### Switching capacity according to UL 489

|  |                                    |
|--|------------------------------------|
| breaking capacity current <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 Y/347 V</li> <li>• at 600 V</li> </ul> | 200 kA<br>100 kA<br>35 kA<br>35 kA |
|--|------------------------------------|

#### Adjustable parameters

|   |         |
|---|---------|
| Adjustable response value current / I <sub>g</sub> min.                 | 0.5 s   |
| Adjustable response value current / I <sub>i</sub> min.                 | 150 A   |
| Adjustable response value current / I <sub>i</sub> max.                 | 1 200 A |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF | No      |

#### Mechanical Design

|             |        |
|-------------|--------|
| height [in] | 7.8 in |
| Height      | 198 mm |
| width [in]  | 4.1 in |
| Width       | 105 mm |
| depth [in]  | 3.4 in |
| depth       | 86 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> | -25 °C<br>70 °C<br>-40 °C<br>80 °C |

#### Certificates

|  |     |
|--|-----|
| reference code / acc. to IEC 81346-2   | Q   |
| certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB | Yes |

#### General Product Approval



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

[Miscellaneous](#)



EG-Konf.



ABS



LRS

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=3VA6210-7JP31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6210-7JP31-0AA0>

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

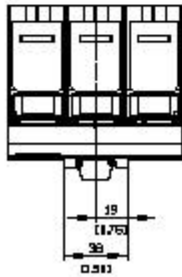
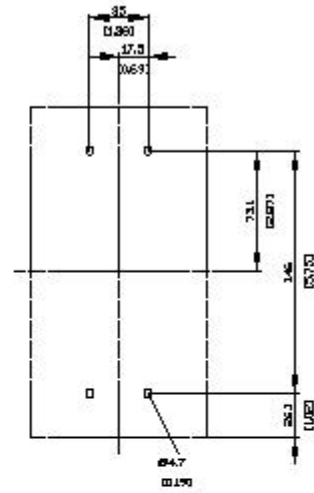
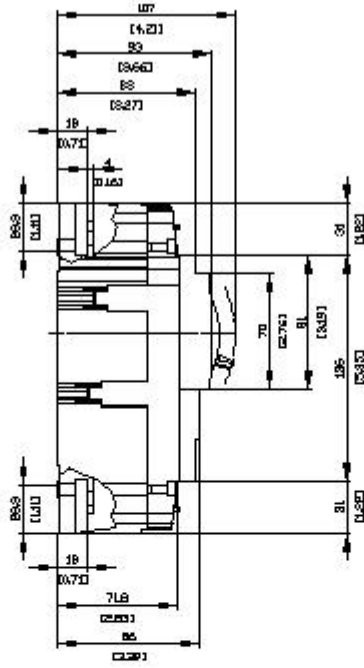
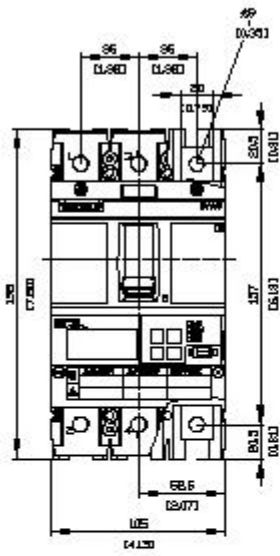
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6210-7JP31-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6210-7JP31-0AA0)

**CAX-Online-Generator**

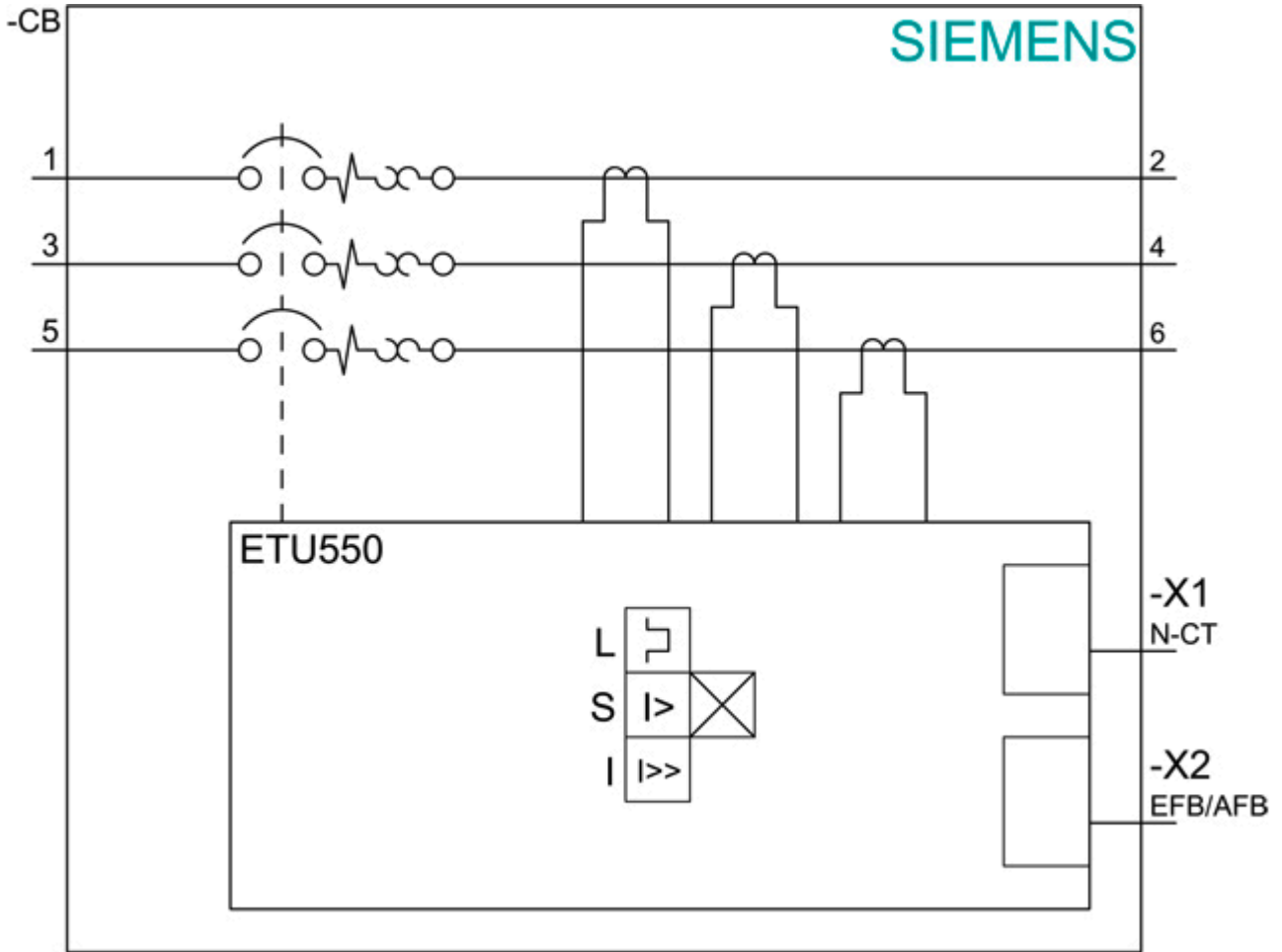
<http://www.siemens.com/cax>

**Tender specifications**

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







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