

Fixed-mounted circuit breaker IEC 60947-2, frame size 2, 3-poles,  $I_n=3200A$  up to 690V AC 50/60Hz, breaking capacity M  $I_{cu}=85/66kA$  at 500/690V, Trip unit ETU300 LSI optimized for standard applications, without display Protection LT, ST, INST, N-protection required an external N-sensor, incl. trip alarm switch (1xCO), rear connection horizontal, without Com & metering function Manual operating mechanism with mechanical closing, without Spring charging motor, Ready-to-close signal. switch, Auxiliary switches 2NO+2NC, without Closing coil (CC), manual operating mechanism with mechanical closing, without Remote trip alarm reset coil (RR), without 2nd shunt trip, without 1st Shunt trip

| Model   |  |
|---|--|
| product brand name  | SENTRON  |
| product designation   | 3WA air circuit breaker  |
| suitability for use   | circuit breaker  |
| size of the circuit-breaker   | II   |
| number of poles   | 3  |
| position / of neutral conductor   | no internal N-conductor  |
| fastening method  | fixed-mounted circuit breakers                                   |
| design of the product   | AC application   |
| type of the driving mechanism   | manual operating mechanism with mechanical or electrical closing |
| design of the electronic trip unit  | ETU300 LSI   |
| Weight  | 63.4 kg  |
| Net Weight  | 50.4 kg  |
| General technical data  |  |
| insulation voltage / rated value  | 1000 V   |
| operating voltage / at AC / at 50/60 Hz / rated value                         | 690 V  |
| power loss [W] / maximum  | 410 W  |
| Current   |  |
| continuous current / rated value / maximum                                    | 3200 A   |
| continuous current / rated value  | 3200 A   |
| operational current   |  |
| • at 40 °C / rated value  | 3200 A   |
| • at 45 °C / rated value  | 3200 A   |
| • at 50 °C / rated value  | 3200 A   |
| • at 55 °C / rated value  | 3200 A   |
| • at 60 °C / rated value  | 3200 A   |
| • at 65 °C / rated value  | 3200 A   |
| • at 70 °C / rated value  | 3200 A   |
| Switching capacity and short-time withstand current, according to IEC 60947-2 |  |
| switching capacity class of the circuit breaker                               | M  |
| maximum short-circuit current breaking capacity ( $I_{cu}$ )                  |  |
| • at 500 V / rated value  | 85 kA  |
| • at 690 V / rated value  | 66 kA  |
| operating short-circuit current breaking capacity ( $I_{cs}$ )                |  |
| • at 500 V / rated value  | 85 kA  |
| • at 690 V / rated value  | 66 kA  |
| short-circuit current making capacity ( $I_{cm}$ )                            |  |
| • at 500 V / rated value  | 187 kA   |
| • at 690 V / rated value  | 145 kA   |
| short-time withstand current ( $I_{cw}$ ) / at 500 V AC                       |  |

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• for 0.5 s / rated value</li> </ul>                                       | 85 kA                                      |
| <ul style="list-style-type: none"> <li>• for 1 s / rated value</li> </ul>   | 85 kA                                      |
| <ul style="list-style-type: none"> <li>• for 2 s / rated value</li> </ul>   | 85 kA                                      |
| <ul style="list-style-type: none"> <li>• for 3 s / rated value</li> </ul>   | 75 kA                                      |
| short-time withstand current (I <sub>cw</sub> ) / at 690 V AC   |  |
| <ul style="list-style-type: none"> <li>• for 0.5 s / rated value</li> </ul>                                       | 66 kA                                      |
| <ul style="list-style-type: none"> <li>• for 1 s / rated value</li> </ul>   | 66 kA                                      |
| <ul style="list-style-type: none"> <li>• for 2 s / rated value</li> </ul>   | 66 kA                                      |
| <ul style="list-style-type: none"> <li>• for 3 s / rated value</li> </ul>   | 66 kA                                      |
| <b>Electronic release unit</b>  |  |
| product feature   |  |
| <ul style="list-style-type: none"> <li>• upgradable</li> </ul>  | No   |
| <ul style="list-style-type: none"> <li>• Bluetooth and USB interface</li> </ul>                                   | No   |
| <ul style="list-style-type: none"> <li>• decoder for basic protection functions</li> </ul>                        | Yes  |
| <ul style="list-style-type: none"> <li>• display and function keys</li> </ul>                                     | No   |
| <ul style="list-style-type: none"> <li>• SENTRON powerconfig configuration software</li> </ul>                    | No   |
| <b>Basic protection functions</b>   |  |
| product feature / for L-tripping  |  |
| <ul style="list-style-type: none"> <li>• can be switched on/off</li> </ul>  | No   |
| <ul style="list-style-type: none"> <li>• selectable characteristic function</li> </ul>                            | No   |
| <ul style="list-style-type: none"> <li>• decoder and infinite adjustability are selectable with eSet</li> </ul>   | No   |
| set values setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic               | 0.4;0.5;0.6;0.7;0.75;0.8;0.85;0.9;0.95;1.0 |
| reference value setting current (I <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic          | x I <sub>n</sub>                           |
| set values delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic                    | 0.75;1;2;5;8;10;14;17;21;25                |
| reference value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic               | s  |
| <b>L: Overload protection N-conductor</b>   |  |
| product feature / with neutral conductor protection / can be switched on/off                                      | No   |
| setting values setting current (I <sub>nN</sub> ) / for N-tripping  | 1  |
| reference value setting current (I <sub>nN</sub> ) / for N-tripping   | x I <sub>n</sub>                           |
| <b>S: delayed short-circuit protection ST</b>   |  |
| product feature / for S-tripping  |  |
| <ul style="list-style-type: none"> <li>• independent of direction / can be switched on/off</li> </ul>             | Yes  |
| <ul style="list-style-type: none"> <li>• independent of direction / selectable characteristic function</li> </ul> | Yes  |
| <ul style="list-style-type: none"> <li>• decoder and infinite adjustability are selectable with eSet</li> </ul>   | No   |
| <b>S: delayed short-circuit protection ST, settings values I<sub>0t</sub></b>                                     |  |
| set values setting current (I <sub>sd</sub> ) / for S-tripping / with I <sub>0t</sub> characteristic              | 1.5;2;2.5;3;4;5;6;8;10                     |
| reference value setting current (I <sub>sd</sub> ) / for S-tripping / with I <sub>0t</sub> characteristic         | x I <sub>r</sub>                           |
| set values delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>0t</sub> characteristic                   | 0.08;0.15;0.22;0.3;0.4                     |
| reference value delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>0t</sub> characteristic              | s  |
| <b>S: delayed short-circuit protection ST, settings values I<sub>2t</sub></b>                                     |  |
| set values setting current (I <sub>sd</sub> ) / for S-tripping / with I <sub>2t</sub> characteristic              | 1.5;2;2.5;3;4;5;6;8;10                     |
| reference value setting current (I <sub>sd</sub> ) / for S-tripping / with I <sub>2t</sub> characteristic         | x I <sub>r</sub>                           |
| set values delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>2t</sub> characteristic                   | 0.08;0.15;0.22;0.3;0.4                     |
| product feature / for I-tripping  |  |
| <ul style="list-style-type: none"> <li>• can be switched on/off</li> </ul>  | No   |
| <ul style="list-style-type: none"> <li>• decoder and infinite adjustability are selectable (with eSet)</li> </ul> | No   |
| set values setting current (I <sub>i</sub> ) / for I-tripping   | 1.5;2;3;4;5;6;8;10;12;15                   |
| reference value setting current (I <sub>i</sub> ) / for I-tripping  | x I <sub>n</sub>                           |
| <b>G: ground fault GF</b>   |  |
| product feature / for G-tripping  |  |
| <ul style="list-style-type: none"> <li>• can be switched on/off</li> </ul>  | No   |
| <ul style="list-style-type: none"> <li>• selectable characteristic function</li> </ul>                            | No   |
| <b>Further protective functions</b>   |  |

|   |   |
|---|---|
| protection function   |   |
| • maintenance mode DAS+   | Yes                                     |
| <b>Measuring functions</b>                                      |   |
| measurement function  |   |
| • current measurement   | Yes                                     |
| <b>Communication</b>  |   |
| communication function  | No                                      |
| <b>Service Life</b>   |   |
| mechanical service life (operating cycles)                      |   |
| • without support / typical                                     | 10000                                   |
| • with support / typical  | 20000                                   |
| electrical endurance (operating cycles)                         |   |
| • at 690 V / without support / typical                          | 4000                                    |
| • at 690 V / with support / typical                             | 20000                                   |
| <b>Dimensions</b>   |   |
| height  | 437 mm                                  |
| width   | 460 mm                                  |
| depth   | 357 mm                                  |
| <b>Main connection</b>  |   |
| arrangement of electrical connectors / for main current circuit | main connection on the rear, horizontal |
| <b>Auxiliary circuit</b>  |   |
| design of the auxiliary switch                                  | 2 NO + 2 NC                             |
| number of NC contacts / for auxiliary contacts                  | 2                                       |
| number of NO contacts / for auxiliary contacts                  | 2                                       |
| number of CO contacts / for auxiliary contacts                  | 0                                       |
| <b>Internal accessories</b>                                     |   |
| product component   |   |
| • undervoltage release  | No                                      |
| • voltage trigger   | No                                      |
| • trip indicator  | Yes                                     |
| • motor drive   | No                                      |
| <b>Environmental conditions</b>                                 |   |
| protection class IP / on the front                              | IP20                                    |
| ambient temperature / during operation                          |   |
| • minimum   | -40 °C                                  |
| • maximum   | 70 °C                                   |
| ambient temperature / during storage                            |   |
| • minimum   | -40 °C                                  |
| • maximum   | 80 °C                                   |
| <b>Certificates</b>   |   |
| reference code  |   |
| • according to IEC 81346-2                                      | Q                                       |
| <b>General Product Approval</b>                                 |   |
| EMV   |   |



[Confirmation](#)



EG-Konf.



RCM

|   |                   |                   |
|---|-------------------|-------------------|
| Radio Equipment Type Approval Certificate | Test Certificates | Marine / Shipping |
|---|-------------------|-------------------|

[Miscellaneous](#)

[Miscellaneous](#)

[Special Test Certificate](#)



ABS



BUREAU VERITAS



LRS

|       |                 |             |
|-------|-----------------|-------------|
| other | Dangerous goods | Environment |
|-------|-----------------|-------------|



**Further information**

**Information on the packaging**

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WA1232-4AB02-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1232-4AB02-0AA0>

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

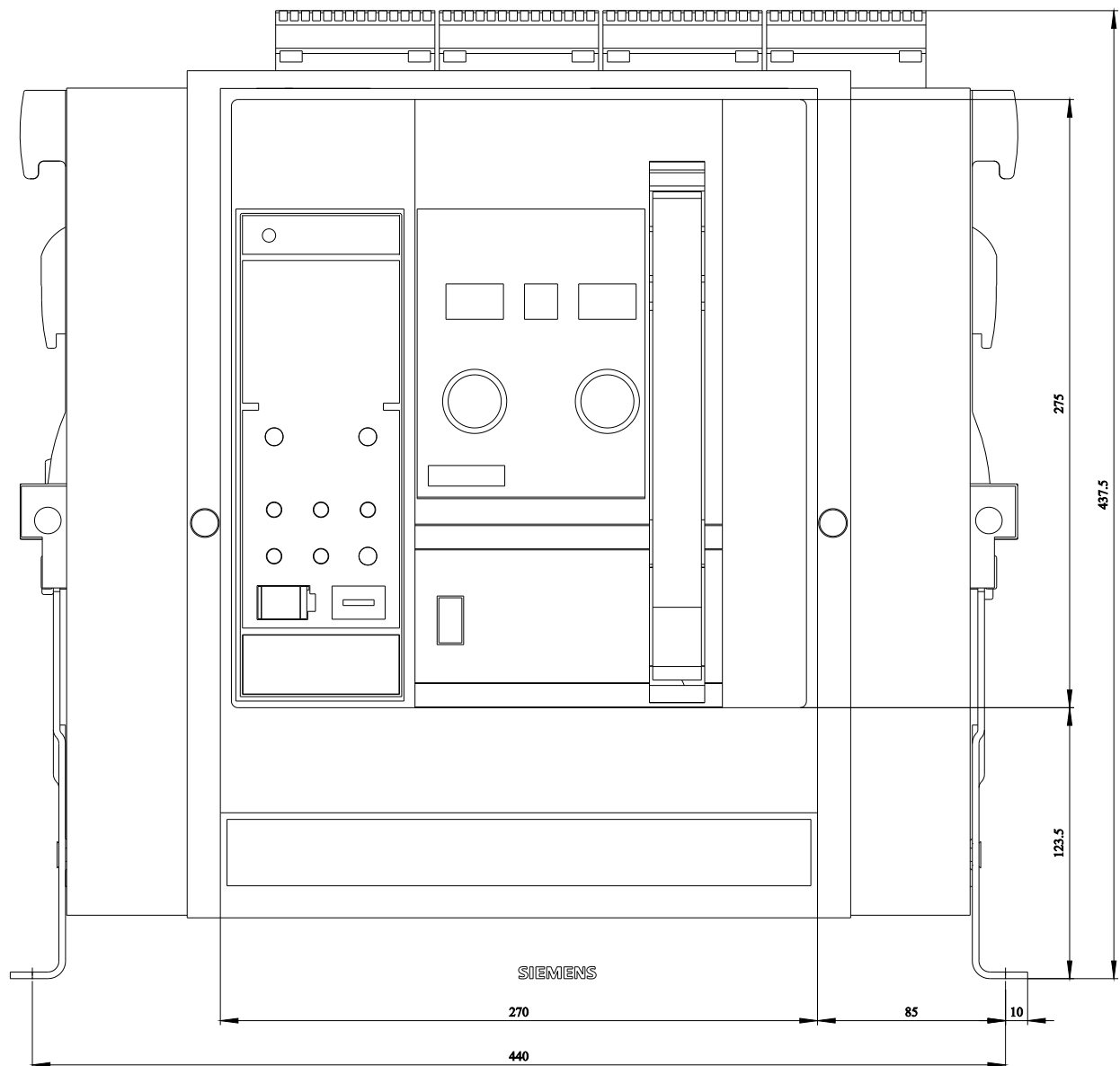
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3WA1232-4AB02-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1232-4AB02-0AA0)

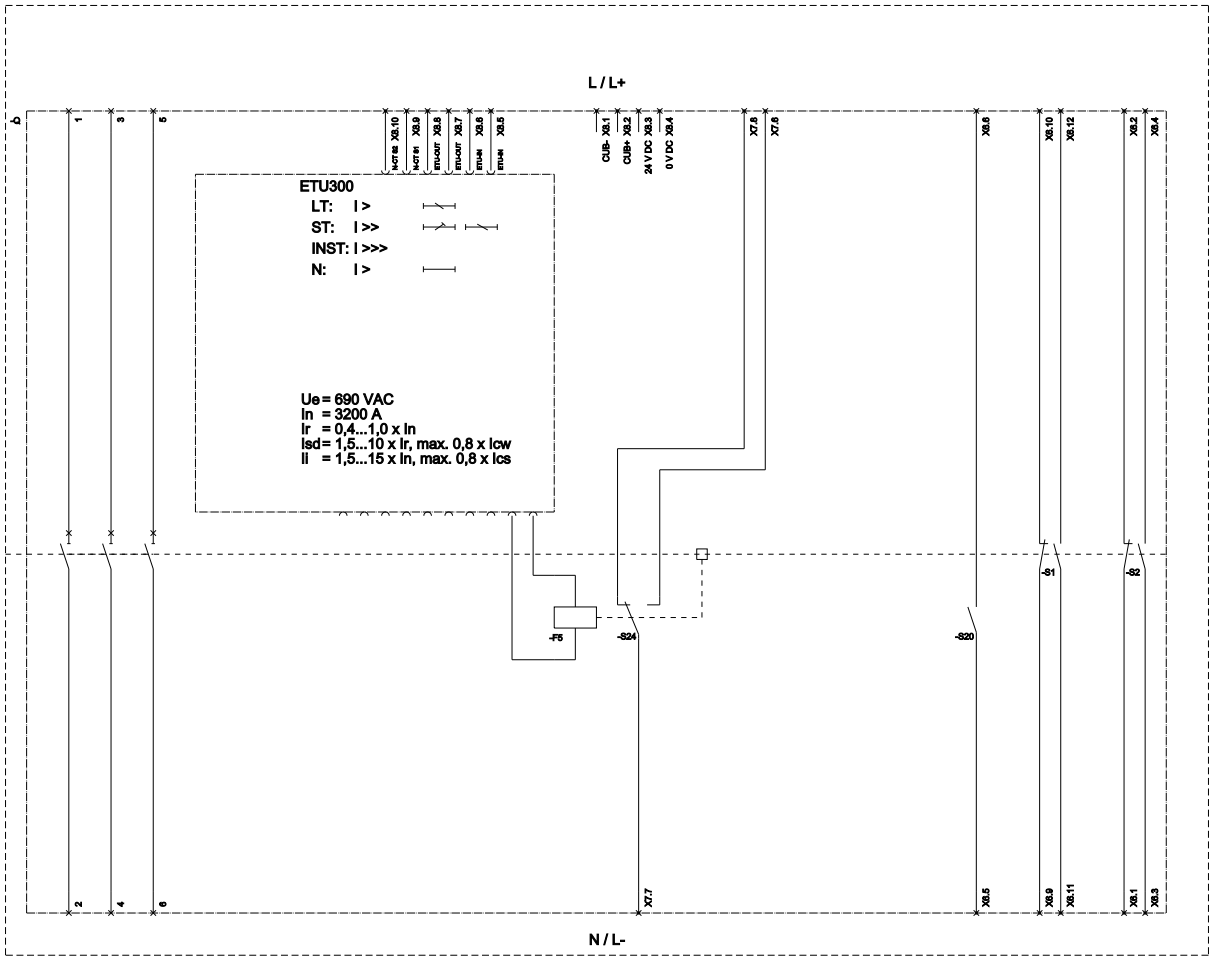
**CAX-Online-Generator**

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

**Information- and Downloadcenter (catalogues, leaflets,...)**

<http://www.siemens.com/energy-automation>





LT (Long Time Delay / Überstromschutz), ST (Short Time Delay / Kurzschlusschutz, Inzertwertschutz), INST (Instantaneous / Kurzschlusschutz, verzögert), N (Neutral Protection / Neutralleiterchutz), CP (Circuit Break Protection / Erdschlusschutz),  
 F8 (Relay for trip unit / Anlaufstromschutz), S24 (TAS: Trip alarm switch (Reset position) / Status Anlaufstromschutz (Reset Position)), S1-S2 (AUX: Auxiliary switch / Hilfskontakt), S20 (RTC: Ready to close signalling switch / Bereitschaftsschaltkontakt)

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4/11/2023

