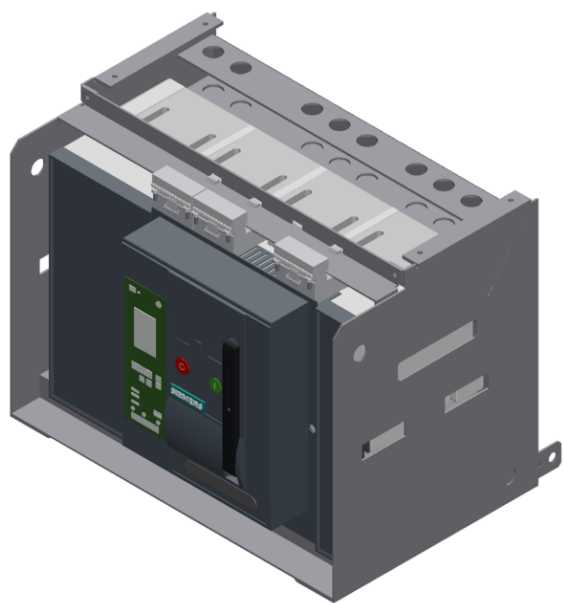


withdrawable circuit breaker without guide frame 4-pole, size II, IEC  
In=2000A to 690V, AC50/60Hz Icu=80kA at 500V rear connection  
horizontal Overcurrent release ETU 76 LSING protection adjustable  
0.4-1 in with graphic display U cubicle bus with ground fault  
protection Opt.: Comm./measuring func./ZSI Motorized/manual  
operating mechanism with spring charging motor AC 50/60 Hz 110-  
127 V AC or 110-125 V DC Activation 50/60 Hz 110 V AC, 110 V DC  
With 1st auxiliary release Shunt release "F", F1 48 V DC, 100% ON  
period without 2nd auxiliary release 4NO+4NC



| Model                             |             |
|-----------------------------------|-------------|
| Product brand name                | SENTRON     |
| Product designation               | ACB         |
| Design of the product             | IEC 60947-2 |
| Design of the auxiliary switch    | 4 NO + 4 NC |
| Design of the operating mechanism | Pushbutton  |

|                                             |                                                                             |
|---------------------------------------------|-----------------------------------------------------------------------------|
| Type of the driving mechanism               | Manual/motorized operating mechanism with mechanical and electrical closing |
| Type of the driving mechanism / motor drive | Yes                                                                         |
| Design of the overcurrent release           | ETU76B                                                                      |

#### General technical data

|                             |      |
|-----------------------------|------|
| Number of poles             | 4    |
| Size of the circuit-breaker | 2    |
| Usage category              | B    |
| circuit-breaker / Design    | 3WL1 |

#### Voltage

|                                |         |
|--------------------------------|---------|
| Rated insulation voltage $U_i$ | 1 000 V |
|--------------------------------|---------|

#### Protection class

|                                                |       |
|------------------------------------------------|-------|
| Protection class IP                            | IP20  |
| Protection class IP / on the front             | IP20  |
| Protective function of the overcurrent release | LSING |

#### Dissipation

|                                                                                             |         |
|---------------------------------------------------------------------------------------------|---------|
| Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 106.7 W |
|---------------------------------------------------------------------------------------------|---------|

#### Electricity

|                                                                |          |
|----------------------------------------------------------------|----------|
| Operating current / at 45 °C / rated value                     | 2 000 A  |
| Continuous current / rated value                               | 2 000 A  |
| Adjustable pick-up value current                               |          |
| • of the current-dependent overload release / Full-scale value | 2 000 A  |
| • of instantaneous short-circuit trip unit / initial value     | 3 000 A  |
| • of instantaneous short-circuit trip unit / Full-scale value  | 64 000 A |

#### Main circuit

|                                     |         |
|-------------------------------------|---------|
| Operating frequency                 |         |
| • 1 / rated value                   | 50 Hz   |
| • 2 / rated value                   | 60 Hz   |
| Operating voltage                   |         |
| • at AC / at 50/60 Hz / rated value | 690 V   |
| Operating current                   |         |
| • at 40 °C / rated value            | 2 000 A |
| • at 50 °C / rated value            | 2 000 A |
| • at 55 °C / rated value            | 2 000 A |

#### Auxiliary circuit

|                                                |   |
|------------------------------------------------|---|
| Number of NC contacts / for auxiliary contacts | 4 |
| Number of NO contacts / for auxiliary contacts | 4 |

| Suitability                                                                                  |                              |
|----------------------------------------------------------------------------------------------|------------------------------|
| Suitability for use                                                                          | Plant / motor protection     |
| Adjustable parameters                                                                        |                              |
| Adjustable pick-up value current                                                             |                              |
| • of the L-trip / with I <sub>4t</sub> characteristic / initial value                        | 800 A                        |
| • of the L-trip / with I <sub>4t</sub> characteristic / Full-scale value                     | 2 000 A                      |
| Adjustable pick-up value current / of the current-dependent overload release / initial value | 800 A                        |
| Product details                                                                              |                              |
| Product component                                                                            |                              |
| • Trip indicator                                                                             | Yes                          |
| • Voltage trigger                                                                            | Yes                          |
| • undervoltage release                                                                       | No                           |
| Product extension / optional / motor drive                                                   | No                           |
| Product function                                                                             |                              |
| Product function                                                                             |                              |
| • Ground fault protection                                                                    | Yes                          |
| • Phase failure detection                                                                    | Yes                          |
| Display and operation                                                                        |                              |
| Display version                                                                              | With fully-graphical display |
| Short circuit                                                                                |                              |
| Operational short-circuit current breaking capacity (I <sub>cs</sub> )                       |                              |
| • at 415 V / rated value                                                                     | 80 kA                        |
| • at 500 V / rated value                                                                     | 80 kA                        |
| • at 690 V / rated value                                                                     | 75 kA                        |
| Maximum short-circuit current breaking capacity (I <sub>cu</sub> )                           |                              |
| • at 415 V / rated value                                                                     | 80 kA                        |
| • at 500 V / rated value                                                                     | 80 kA                        |
| • at 690 V / rated value                                                                     | 75 kA                        |
| Connections                                                                                  |                              |
| Arrangement of electrical connectors / for main current circuit                              | without guide frame          |
| Type of electrical connection / for main current circuit                                     | Blade contacts               |
| Mechanical Design                                                                            |                              |
| Height                                                                                       | 411.5 mm                     |
| Width                                                                                        | 555 mm                       |
| Depth                                                                                        | 337 mm                       |
| Mounting type                                                                                | drawer unit                  |

## Environmental conditions

### Ambient temperature

- |                              |        |
|------------------------------|--------|
| • during operation / minimum | -20 °C |
| • during operation / maximum | 55 °C  |
| • during storage / minimum   | -40 °C |
| • during storage / maximum   | 70 °C  |

## Certificates

### Reference code

- |                          |   |
|--------------------------|---|
| • acc. to DIN EN 61346-2 | Q |
| • acc. to DIN EN 81346-2 | Q |

| General Product Approval                                                                 | Declaration of Conformity                                                                | Test Certificates                                                                             |                                                                           | Shipping Approval                                                                          |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <br>CCC | <br>VDE | <br>EG-Konf. | <a href="#">Special Test Certificate</a><br><a href="#">Miscellaneous</a> | <br>ABS |

| Shipping Approval                                                                                    | other                                                                                    |                                                                                           |                                                                                           |                                                                                              |                                             |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------|
| <br>BUREAU VERITAS | <br>GL | <br>LRS | <br>PRS | <br>RMRS | <a href="#">Environmental Confirmations</a> |

| other                                                                     |
|---------------------------------------------------------------------------|
| <a href="#">Manufacturer Declaration</a><br><a href="#">Miscellaneous</a> |

## Further information

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WL1220-3NG45-5DA4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WL1220-3NG45-5DA4>

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

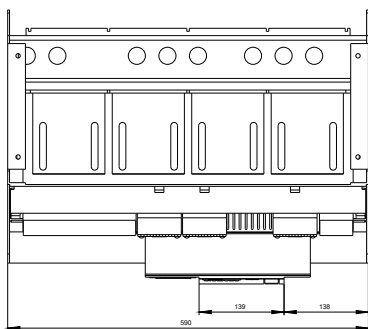
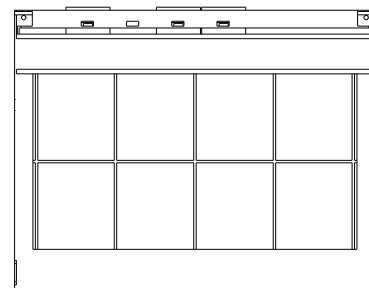
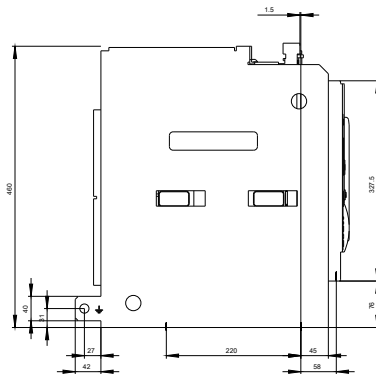
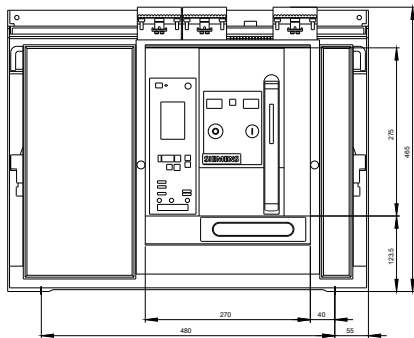
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3WL1220-3NG45-5DA4](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WL1220-3NG45-5DA4)

### CAX-Online-Generator

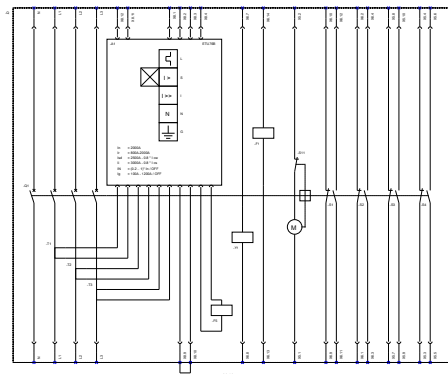
<http://www.siemens.com/cax>

### Tender specifications

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



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1. 3WL Time Delay (Überstromschutz), 2. 3WL Time Delay (Überstromschutz), 3. 3WL Time Delay (Überstromschutz), 4. 3WL Time Delay (Überstromschutz), 5. 3WL Time Delay (Überstromschutz), 6. 3WL Time Delay (Überstromschutz), 7. 3WL Time Delay (Überstromschutz), 8. 3WL Time Delay (Überstromschutz), 9. 3WL Time Delay (Überstromschutz), 10. 3WL Time Delay (Überstromschutz), 11. 3WL Time Delay (Überstromschutz), 12. 3WL Time Delay (Überstromschutz)

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