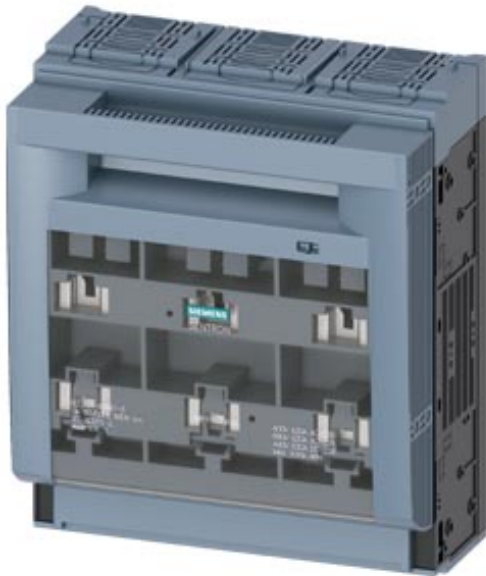


SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH3, 630 A, for assembly and installation on mounting plate, flat terminal, cover level 70 mm



| Model                                       |                               |
|---|-------------------------------|
| Product brand name                          | SENTRON                       |
| Product designation                         | 3NP1 fuse switch disconnecter |
| Design of the product                       | cover level 70 mm             |
| Design of the safety monitoring             | Without                       |
| Design of the operating mechanism           | Cover handle                  |
| Design of the load switch / Strip form      | No                            |
| Type of the driving mechanism / motor drive | No                            |

| General technical data   |   |
|--|---|
| Number of poles  | 3   |
| Type of device   | For assembly and installation on mounting plate |
| Size of disconnecting link                                     | 3 and 2   |
| Size of fuse link  | NH2, NH3  |
| Continuous current / at 35 °C / rated value                    | 630 A   |
| Let-through current / with closed switch / maximum permissible | 60 kA   |
| cut-off value $I^{*2}t_{max.}$ / 500 V                         | 5 400 000 A <sup>2</sup> ·s                     |
| Power factor   |   |
| • at AC-22 B   | 0.65  |

|  |             |
|--|-------------|
| <ul style="list-style-type: none"> <li>• at AC-23 B</li> </ul>           | 0.35        |
| <ul style="list-style-type: none"> <li>• with capacitive load</li> </ul> | -0.25       |
| circuit-breaker / Design   | 3NP11       |
| Mechanical service life (switching cycles) / typical                     | 1 000       |
| Fuse system  | LV HRC fuse |
| Degree of pollution  | 3           |

### Voltage

|  |         |
|--|---------|
| Insulation voltage   |         |
| <ul style="list-style-type: none"> <li>• rated value</li> </ul>                              | 690 V   |
| <ul style="list-style-type: none"> <li>• with degree of pollution 3 / rated value</li> </ul> | 690 V   |
| <ul style="list-style-type: none"> <li>• with degree of pollution 2 / rated value</li> </ul> | 1 000 V |
| Power factor / at AC-21 B  | 0.95    |
| Surge voltage resistance / rated value   | 8 kV    |
| Current / at AC / rated value  | 630 A   |
| Operating voltage  |         |
| <ul style="list-style-type: none"> <li>• at AC / rated value / maximum</li> </ul>            | 690 V   |
| <ul style="list-style-type: none"> <li>• at DC / rated value</li> </ul>                      | 440 V   |
| <ul style="list-style-type: none"> <li>• at DC / rated value / maximum</li> </ul>            | 440 V   |

### Protection class

|   |      |
|---|------|
| Protection class IP   |      |
| <ul style="list-style-type: none"> <li>• with closed switch / with cover or cable lug cover</li> </ul>    | IP40 |
| <ul style="list-style-type: none"> <li>• with closed switch / without cover or cable lug cover</li> </ul> | IP30 |
| <ul style="list-style-type: none"> <li>• on the front</li> </ul>  | IP40 |
| <ul style="list-style-type: none"> <li>• open</li> </ul>  | IP20 |

### Dissipation

|  |      |
|--|------|
| Power loss [W]   |      |
| <ul style="list-style-type: none"> <li>• with conventional rated thermal current / without fuse / per pole</li> </ul>          | 30 W |
| <ul style="list-style-type: none"> <li>• with conventional rated thermal current / without fuse / per device</li> </ul>        | 90 W |
| <ul style="list-style-type: none"> <li>• for rated value of the current / at AC / in hot operating state / per pole</li> </ul> | 78 W |
| <ul style="list-style-type: none"> <li>• of the fuse / per fuse / maximum</li> </ul>   | 48 W |

### Current

|   |       |
|---|-------|
| Operating current   |       |
| <ul style="list-style-type: none"> <li>• at AC-23 B / at 690 V / rated value</li> </ul> | 200 A |
| <ul style="list-style-type: none"> <li>• at AC-23 B / at 500 V / rated value</li> </ul> | 500 A |
| <ul style="list-style-type: none"> <li>• at AC-23 B / at 400 V / rated value</li> </ul> | 630 A |
| <ul style="list-style-type: none"> <li>• at AC-23 B / at 240 V / rated value</li> </ul> | 630 A |

|  |                             |
|--|-----------------------------|
| • at AC-22 B / at 690 V / rated value                                  | 500 A                       |
| • at AC-22 B / at 500 V / rated value                                  | 630 A                       |
| • at AC-22 B / at 400 V / rated value                                  | 630 A                       |
| • at AC-22 B / at 240 V / rated value                                  | 630 A                       |
| • at AC-21 B / at 690 V / rated value                                  | 630 A                       |
| • at AC-21 B / at 500 V / rated value                                  | 630 A                       |
| • at AC-21 B / at 400 V / rated value                                  | 630 A                       |
| • at AC-21 B / at 240 V / rated value                                  | 630 A                       |
| • at DC-23 B / at 440 V / rated value / maximum                        | 250 A                       |
| • at DC-23 B / at 240 V / rated value / maximum                        | 400 A                       |
| • at DC-23 B / at 120 V / rated value / maximum                        | 400 A                       |
| • at DC-22 B / at 440 V / rated value / maximum                        | 500 A                       |
| • at DC-22 B / at 240 V / rated value / maximum                        | 630 A                       |
| • at DC-22 B / at 120 V / rated value / maximum                        | 630 A                       |
| • at DC-21 B / at 440 V / rated value / maximum                        | 630 A                       |
| • at DC-21 B / at 240 V / rated value / maximum                        | 630 A                       |
| • at DC-21 B / at 120 V / rated value / maximum                        | 630 A                       |
| Continuous current   |                             |
| • rated value  | 630 A                       |
| • at 40 °C / rated value   | 610 A                       |
| • at 45 °C / rated value   | 575 A                       |
| • at 50 °C / rated value   | 555 A                       |
| • at 55 °C / rated value   | 530 A                       |
| Let-through current / with high-speed activation / maximum permissible | 50 kA                       |
| Let-through current / I <sub>c</sub> / maximum permissible             |                             |
| • 400 V  | 60 000 A                    |
| • 500V   | 60 000 A                    |
| cut-off value I <sup>2</sup> t <sub>max.</sub> / 400 V                 | 4 340 000 A <sup>2</sup> ·s |
| <b>Main circuit</b>  |                             |
| Operating current / with capacitive load                               |                             |
| • at 400 V / maximum   | 72 A                        |
| • at 500 V / maximum   | 55 A                        |
| <b>Auxiliary circuit</b>   |                             |
| Number of CO contacts / for auxiliary contacts                         | 0                           |
| Number of NC contacts / for auxiliary contacts                         | 0                           |
| Number of NO contacts / for auxiliary contacts                         | 0                           |
| <b>Suitability</b>   |                             |
| <b>Suitability for use</b>   |                             |
| • Main switch  | No                          |
| • switch disconnector  | Yes                         |

|                             |     |
|-----------------------------|-----|
| • EMERGENCY OFF switch      | No  |
| • safety switch             | Yes |
| • maintenance/repair switch | Yes |

### Product details

|   |     |
|---|-----|
| Product feature / interlock                 | Yes |
| Product component                           |     |
| • Trip indicator                            | No  |
| • Phase failure monitoring                  | No  |
| • undervoltage release                      | No  |
| • undervoltage release with leading contact | No  |
| Product feature / sealable                  | Yes |
| Product extension                           |     |
| • Auxiliary switch                          | Yes |
| • optional                                  |     |
| — locking capability                        | Yes |
| — motor drive                               | No  |
| — Phase failure monitoring                  | Yes |
| — fuse monitoring                           | Yes |
| — Voltage trigger                           | No  |
| — Overvoltage protection monitoring         | Yes |

### Product function

|                                     |    |
|-------------------------------------|----|
| Product function                    |    |
| • fuse monitoring                   | No |
| • Overvoltage protection monitoring | No |

### Short circuit

|   |        |
|---|--------|
| Conditional short-circuit current (I <sub>q</sub> )           |        |
| • rated value   | 50 kA  |
| • at AC / at 240 V / with high-speed activation / rated value | 50 kA  |
| • at AC / at 500 V / with high-speed activation / rated value | 50 kA  |
| • at AC / at 690 V / with high-speed activation / rated value | 50 kA  |
| • with closed switch / at AC / at 240 V / rated value         | 100 kA |
| • with closed switch / at AC / at 500 V / rated value         | 100 kA |
| • with closed switch / at AC / at 690 V / rated value         | 100 kA |

### Connections



|  |  |
|--|--|
| Arrangement of electrical connectors / for main current circuit                                  | other  |
| Connectable conductor cross-section / for main contacts  |  |
| <ul style="list-style-type: none"> <li>• single or multi-stranded</li> <li>• stranded</li> </ul> | 120 ... 300 mm <sup>2</sup><br>120 ... 300 mm <sup>2</sup> |
| Tightening torque / with screw-type terminals  | 10 ... 12 N·m  |
| Type of connection   | Flat terminal  |
| Type of electrical connection / for main current circuit   | busbar connection  |

### Mechanical Design

|  |                                  |
|--|----------------------------------|
| Height   | 306 mm                           |
| Width  | 249.4 mm                         |
| Depth  | 138.5 mm                         |
| Mounting type  | mounting plate                   |
| Mounting type  |                                  |
| <ul style="list-style-type: none"> <li>• floor mounting</li> <li>• front mounting</li> <li>• front mounting with 4-hole attachment</li> <li>• front mounting with central attachment</li> <li>• rail mounting</li> </ul> | Yes<br>No<br>No<br>No<br>No      |
| Mounting position  | horizontal/vertical              |
| Net weight   | 4.63 kg                          |
| <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>   | -25 ... +55 °C<br>-50 ... +80 °C |

### Certificates

|  |        |
|--|--------|
| Reference code   |        |
| <ul style="list-style-type: none"> <li>• acc. to DIN EN 61346-2</li> <li>• acc. to DIN EN 81346-2</li> </ul> | Q<br>Q |

|  |   |   |
|--|---|---|
| <b>General Product Approval</b>  | <b>Declaration of Conformity</b>  | <b>Test Certificates</b>  |
| <br>CCC | <br>UR | <br>VDE        |
|  | <a href="#">Miscellaneous</a>   | <br>EG-Konf. |
|  |   | <a href="#">Type Test Certificates/Test Report</a>  |

|                          |                          |
|--------------------------|--------------------------|
| <b>Test Certificates</b> | <b>Shipping Approval</b> |
|--------------------------|--------------------------|

[Special Test Certificate](#)



LRS

## 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?mfb=3NP1163-1DA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1163-1DA10>

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

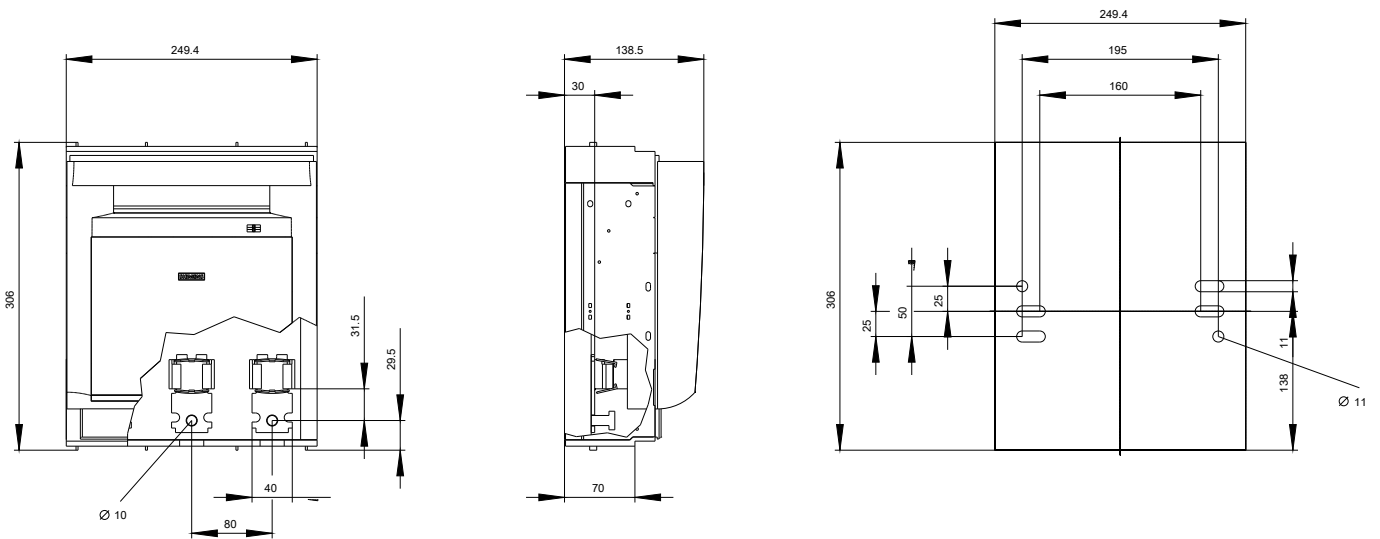
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3NP1163-1DA10](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3NP1163-1DA10)

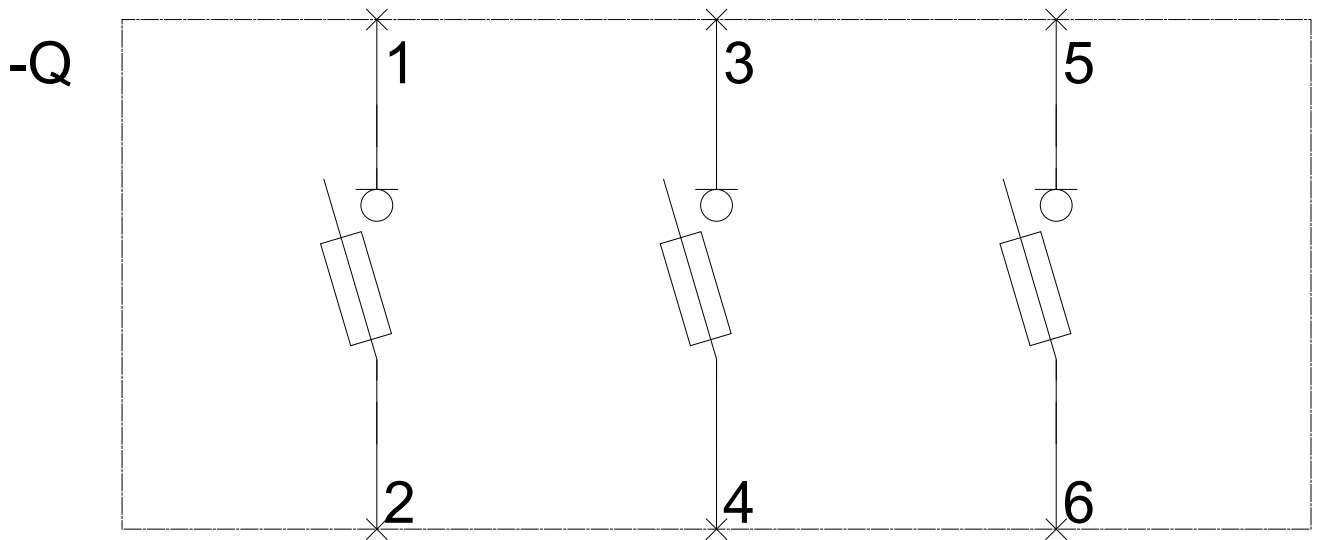
**CAX-Online-Generator**

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

**Tender specifications**

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





**-CB**

