# **SIEMENS**

### Data sheet

## 3NP1163-1BC11

SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH3, 630 A, for Busbar system 8US 60 mm, flat terminal, Fuse monitoring: electromechanical, Cover level 32/70 mm



| Model  |                               |
|--|-------------------------------|
| Product brand name                                 | SENTRON                       |
| Product designation                                | 3NP1 fuse switch disconnector |
| Design of the product                              | cover level 32/70 mm          |
| Busbar design                                      | busbar thickness 5 or 10 mm   |
| Design of the safety monitoring                    | electro mechanical            |
| 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 60 mm 8US busbar system   |
| 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 | 60 kA                         |
| permissible  |                               |
| cut-off value I**2t,max. / 500 V                   | 5 400 000 A²·s                |
| Power factor                                       |                               |
|  |                               |

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| • at AC-22 B   | 0.65           |
|--|----------------|
| • at AC-23 B   | 0.35           |
| <ul> <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    |
| Voltage  |                |
| Insulation voltage / rated value   | 690 V          |
| Power factor / at AC-21 B  | 0.95           |
| Surge voltage resistance / rated value                                     | 8 kV           |
|  |                |
| Protection class<br>Protection class IP                                    |                |
|  | 1040           |
| <ul> <li>with closed switch / with cover or cable lug<br/>cover</li> </ul> | IP40           |
| with closed switch / without cover or cable lug                            | IP30           |
| cover  |                |
| • on the front   | IP40           |
| • open   | IP20           |
|  |                |
| Electricity  |                |
| 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 / Ic / maximum permissible                             |                |
| • 400 V  | 60 000 A       |
| • 500V   | 60 000 A       |
| cut-off value I**2t,max. / 400 V   | 5 400 000 A²·s |
| Main circuit   |                |
| Operating voltage  |                |
| <ul> <li>at AC / rated value / minimum</li> </ul>                          | 24 V           |
| <ul> <li>at AC / rated value / maximum</li> </ul>                          | 690 V          |
| at DC / rated value  | 250 V          |
| • at DC / rated value / minimum  | 24 V           |
| at DC / rated value / maximum  | 250 V          |
| Operating current / with capacitive load                                   |                |
| • at 400 V / maximum   | 72 A           |
| • at 500 V / maximum   | 55 A           |
|  |                |

| Auxiliary circuit   |        |  |  |
|---|--------|--|--|
| Number of CO contacts / for auxiliary contacts                                      | 0      |  |  |
| Number of NC contacts / for auxiliary contacts                                      | 0      |  |  |
| Number of NO contacts / for auxiliary contacts                                      | 0      |  |  |
| -   |        |  |  |
| Suitability   |        |  |  |
| Suitability for use   | NL.    |  |  |
| • Main switch   | No     |  |  |
| switch disconnector   | Yes    |  |  |
| <ul> <li>EMERGENCY OFF switch</li> </ul>  | No     |  |  |
| <ul> <li>safety switch</li> </ul>   | Yes    |  |  |
| maintenance/repair switch   | Yes    |  |  |
| Product details   |        |  |  |
| Product feature / interlock   | Yes    |  |  |
| Product component   |        |  |  |
| Trip indicator  | Yes    |  |  |
| <ul> <li>Phase failure monitoring</li> </ul>  | No     |  |  |
| <ul> <li>undervoltage release</li> </ul>  | No     |  |  |
| <ul> <li>undervoltage release with leading contact</li> </ul>                       | No     |  |  |
| Product feature / sealable  | Yes    |  |  |
| Product extension   |        |  |  |
| Auxiliary switch  | Yes    |  |  |
| • optional  |        |  |  |
| — locking capability  | Yes    |  |  |
| — motor drive   | No     |  |  |
| — Phase failure monitoring  | Yes    |  |  |
| — Voltage trigger   | No     |  |  |
| — Overvoltage protection monitoring   | Yes    |  |  |
| Product function  |        |  |  |
| Product function  |        |  |  |
| fuse monitoring   | Yes    |  |  |
| Overvoltage protection monitoring   | No     |  |  |
|   |        |  |  |
| Short circuit   |        |  |  |
| Conditional short-circuit current (Iq)  | 50 14  |  |  |
| • rated value   | 50 kA  |  |  |
| <ul> <li>at AC / at 500 V / with high-speed activation /<br/>rated value</li> </ul> | 50 kA  |  |  |
| <ul> <li>at AC / at 690 V / with high-speed activation /<br/>rated value</li> </ul> | 50 kA  |  |  |
| <ul> <li>with closed switch / at AC / at 500 V / rated value</li> </ul>             | 100 kA |  |  |
|   |        |  |  |

 $\bullet$  with closed switch / at AC / at 690 V / rated value

| Connections  |                     |
|--|---------------------|
| Arrangement of electrical connectors / for main          | other               |
| current circuit  |                     |
| Connectable conductor cross-section / for main           |                     |
| contacts   |                     |
| <ul> <li>single or multi-stranded / minimum</li> </ul>   | 120 mm²             |
| <ul> <li>single or multi-stranded / maximum</li> </ul>   | 300 mm <sup>2</sup> |
| • stranded / minimum                                     | 120 mm²             |
| <ul> <li>stranded / maximum</li> </ul>                   | 300 mm <sup>2</sup> |
| Tightening torque / with screw-type terminals            |                     |
| • minimum  | 10 N·m              |
| • maximum  | 12 N·m              |
| Type of electrical connection / for main current circuit | busbar connection   |
| Mechanical Design  |                     |
| Height   | 306 mm              |
| Width  | 249.4 mm            |
| Depth  | 242.3 mm            |
| Mounting position  | horizontal/vertical |
| Mounting type  | busbar              |

No

No

No

No

Yes

60 mm

7.28 kg

| Degree of pollution                            | 3      |  |
|--|--------|--|
| Ambient temperature                            |        |  |
| <ul> <li>during operation / minimum</li> </ul> | -25 °C |  |
| <ul> <li>during operation / maximum</li> </ul> | 55 °C  |  |
| • during storage / minimum                     | -50 °C |  |
| <ul> <li>during storage / maximum</li> </ul>   | 80 °C  |  |
| Certificates                                   |        |  |
| Reference code                                 |        |  |
|  | 0      |  |

Mounting type

Net weight

• floor mounting

• front mounting

• rail mounting

Busbar center-to-center spacing

• front mounting with 4-hole attachment

• front mounting with central attachment

| General Proc | duct Approval    |     |               | Declaration of<br>Conformity | Test Certific-<br>ates                  |
|--------------|------------------|-----|---------------|------------------------------|---|
|              | <b>GNU</b><br>UR | VDE | Miscellaneous | EG-Konf.                     | Type Test Certific-<br>ates/Test Report |

#### **Shipping Approval**



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?mlfb=3NP1163-1BC11

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3NP1163-1BC11

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP1163-1BC11

CAx-Online-Generator http://www.siemens.com/cax

Tender specifications http://www.siemens.com/specifications





