# **SIEMENS**

#### Data sheet

### 3NP1163-1DA20

SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH3, 630 A, for assembly and installation on mounting plate, Box terminal, Cover level 70 mm



| Model  |   |
|--|---|
| Product brand name                                 | SENTRON   |
| Product designation                                | 3NP1 fuse switch disconnector                   |
| 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 | 60 kA   |
| permissible  |   |
| cut-off value I**2t,max. / 500 V                   | 5 400 000 A <sup>2</sup> ·s                     |
| Power factor                                       |   |
| • 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    |
|   |                |
| Insulation voltage / rated value  | 690 V          |
| Power factor / at AC-21 B   | 0.95           |
| Surge voltage resistance / rated value  | 8 kV           |
| Protection class  |                |
| Protection class IP   |                |
| <ul> <li>with closed switch / with cover or cable lug<br/>cover</li> </ul>    | IP40           |
| <ul> <li>with closed switch / without cover or cable lug<br/>cover</li> </ul> | IP30           |
| • 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 / maximum</li> </ul>                             | 690 V          |
| • at DC / rated value   | 440 V          |
| • at DC / rated value / maximum   | 440 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   |        |
| Main switch   | No     |
| <ul> <li>switch disconnector</li> </ul>   | Yes    |
| <ul> <li>EMERGENCY OFF switch</li> </ul>  | No     |
| <ul> <li>safety switch</li> </ul>   | Yes    |
| <ul> <li>maintenance/repair switch</li> </ul>                                       | Yes    |
| Product details   |        |
| Product feature / interlock   | Yes    |
| Product component   |        |
| Trip indicator  | No     |
| <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   |        |
| <ul> <li>Auxiliary switch</li> </ul>  | Yes    |
| optional  |        |
| — locking capability  | Yes    |
| — motor drive   | No     |
| — Phase failure monitoring  | Yes    |
| — fuse monitoring   | Yes    |
| — Voltage trigger   | No     |
| <ul> <li>Overvoltage protection monitoring</li> </ul>                               | Yes    |
| Product function  |        |
| Product function  |        |
| <ul> <li>fuse monitoring</li> </ul>   | No     |
| <ul> <li>Overvoltage protection monitoring</li> </ul>                               | No     |
| Short circuit   |        |
| Conditional short-circuit current (Iq)  |        |
| <ul> <li>rated value</li> </ul>   | 50 kA  |
| <ul> <li>at AC / at 500 V / with high-speed activation /</li> </ul>                 | 50 kA  |
| rated value   |        |
| <ul> <li>at AC / at 690 V / with high-speed activation /<br/>rated value</li> </ul> | 50 kA  |
| • with closed switch / at AC / at 500 V / rated                                     | 100 kA |
| value   |        |
| <ul> <li>with closed switch / at AC / at 690 V / rated value</li> </ul>             | 100 kA |

| 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>     | 50 mm <sup>2</sup>  |  |
| <ul> <li>single or multi-stranded / maximum</li> </ul>     | 300 mm <sup>2</sup> |  |
| <ul> <li>stranded / minimum</li> </ul>                     | 50 mm <sup>2</sup>  |  |
| <ul> <li>stranded / maximum</li> </ul>                     | 300 mm <sup>2</sup> |  |
| Tightening torque / with screw-type terminals              |                     |  |
| • minimum  | 10 N·m              |  |
| • maximum  | 25 N·m              |  |
| Type of connectable conductor cross-sections / of the      | 20 x 32 mm          |  |
| laminated conductors / maximum                             |                     |  |
| Type of electrical connection / for main current circuit   | box terminal        |  |
| Mechanical Design  |                     |  |
| Height   | 306 mm              |  |
| Width  | 249.4 mm            |  |
| Depth  | 134.5 mm            |  |
| Mounting position  | horizontal/vertical |  |
| Mounting type  | mounting plate      |  |
| Mounting type  |                     |  |
| • floor mounting   | Yes                 |  |
| • front mounting   | No                  |  |
| <ul> <li>front mounting with 4-hole attachment</li> </ul>  | No                  |  |
| <ul> <li>front mounting with central attachment</li> </ul> | No                  |  |
| ● rail mounting  | No                  |  |
| Net weight   | 4.63 kg             |  |
|  |                     |  |
| Environmental conditions                                   | 2                   |  |
| Ambient temperature  | 3                   |  |
| Ambient temperature  | -25 °C              |  |
|  | -23 0               |  |
| during operation / maximum                                 |                     |  |
| during storage / minimum                                   | -50 °C              |  |
| <ul> <li>during storage / maximum</li> </ul>               | 80 °C               |  |
| Certificates   |                     |  |
| Reference code   |                     |  |
| • acc. to DIN EN 61346-2                                   | Q                   |  |
| • acc. to DIN EN 81346-2                                   | Q                   |  |

| General Proc | duct Approval     |         |                      | Declaration of<br>Conformity | Test Certific-<br>ates        |
|--------------|-------------------|---------|----------------------|------------------------------|-------------------------------|
|              | <b>GAN®</b><br>UR | UDE VDE | <u>Miscellaneous</u> | EG-Konf.                     | Special Test Certi-<br>ficate |

| Test Certific-<br>ates                  | Shipping Approval          |
|---|----------------------------|
| Type Test Certific-<br>ates/Test Report | Lloyd's<br>Register<br>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=3NP1163-1DA20

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3NP1163-1DA20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP1163-1DA20

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

## Tender specifications

http://www.siemens.com/specifications











