# **SIEMENS**

### Data sheet

## 3NP1133-1JB12

SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH00, 160 A, for Rittal busbar system 40 mm, flat terminal, Fuse monitoring: electronic EFM10, 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                    | electronic EFM 10              |  |  |
| 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 Rittal 40 mm busbar system |  |  |
| Size of disconnecting link                         | 00 and 000                     |  |  |
| Size of fuse link                                  | NH000, NH00                    |  |  |
| Continuous current / at 35 °C / rated value        | 160 A                          |  |  |
| Let-through current / with closed switch / maximum | 23 kA                          |  |  |
| permissible  |                                |  |  |
| cut-off value I**2t,max. / 500 V                   | 158 000 A²·s                   |  |  |
| Power factor                                       |                                |  |  |
|  |                                |  |  |

|  | 0.05                      |
|--|---------------------------|
| • at AC-22 B   | 0.65                      |
| • at AC-23 B   | 0.45                      |
| <ul> <li>with capacitive load</li> </ul>                               | -0.25                     |
| circuit-breaker / Design   | 3NP11                     |
| Mechanical service life (switching cycles) / typical                   | 2 000                     |
| 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   |                           |
| Protection class IP  |                           |
| <ul> <li>with closed switch / with cover or cable lug</li> </ul>       | IP40                      |
| cover  |                           |
| <ul> <li>with closed switch / without cover or cable lug</li> </ul>    | IP30                      |
| cover  |                           |
| • on the front   | IP40                      |
| • open   | IP20                      |
| Electricity  |                           |
| Continuous current   |                           |
| • rated value  | 160 A                     |
| ● at 40 °C / rated value   | 155 A                     |
| ● at 45 °C / rated value   | 145 A                     |
| • at 50 °C / rated value   | 140 A                     |
| • at 55 °C / rated value   | 133 A                     |
| Let-through current / with high-speed activation / maximum permissible | 15 kA                     |
| Let-through current / Ic / maximum permissible                         |                           |
| • 400 V  | 23 000 A                  |
| • 500V   | 23 000 A                  |
| cut-off value I**2t,max. / 400 V                                       | 158 000 A <sup>2.</sup> s |
| Main aircuit   |                           |
| Main circuit<br>Operating voltage                                      |                           |
| at AC / rated value / minimum  | 230 V                     |
| • at AC / rated value / maximum  | 690 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  | 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     |
| <ul> <li>Overvoltage protection monitoring</li> </ul>                               | Yes    |
| Product function  |        |
| Product function  |        |
| <ul> <li>fuse monitoring</li> </ul>   | Yes    |
| <ul> <li>Overvoltage protection monitoring</li> </ul>                               | No     |
| Short circuit   |        |
| Conditional short-circuit current (Iq)  |        |
| rated value   | 80 kA  |
| <ul> <li>at AC / at 500 V / with high-speed activation /<br/>rated value</li> </ul> | 80 kA  |
| <ul> <li>at AC / at 690 V / with high-speed activation /<br/>rated value</li> </ul> | 80 kA  |
| <ul> <li>with closed switch / at AC / at 500 V / rated value</li> </ul>             | 120 kA |
| <ul> <li>with closed switch / at AC / at 690 V / rated value</li> </ul>             | 120 kA |
| Connections   |        |

| Arrangement of electrical connectors / for main<br>current circuit | other               |
|--|---------------------|
| Connectable conductor cross-section / for main contacts            |                     |
| <ul> <li>single or multi-stranded / minimum</li> </ul>             | 2.5 mm <sup>2</sup> |
| <ul> <li>single or multi-stranded / maximum</li> </ul>             | 95 mm²              |
| • stranded / minimum   | 2.5 mm <sup>2</sup> |
| <ul> <li>stranded / maximum</li> </ul>                             | 95 mm²              |
| 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   | 215.1 mm            |
| Width  | 105.8 mm            |
| Depth  | 174.4 mm            |
| Mounting position  | horizontal/vertical |
| Mounting type  | busbar              |
| Mounting type  |                     |
| <ul> <li>floor mounting</li> </ul>                         | No                  |
| <ul> <li>front mounting</li> </ul>                         | No                  |
| <ul> <li>front mounting with 4-hole attachment</li> </ul>  | No                  |
| <ul> <li>front mounting with central attachment</li> </ul> | No                  |
| • rail mounting  | Yes                 |
| Busbar center-to-center spacing                            | 40 mm               |
| Net weight   | 1.12 kg             |

| Environmental conditions                       |        |  |
|--|--------|--|
| Degree of pollution                            | 2      |  |
| Ambient temperature                            |        |  |
| <ul> <li>during operation / minimum</li> </ul> | -25 °C |  |
| <ul> <li>during operation / maximum</li> </ul> | 55 °C  |  |
| <ul> <li>during storage / minimum</li> </ul>   | -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 Pro | duct Approval |               | Declaration of<br>Conformity | Test Certific-<br>ates                  | Shipping Ap-<br>proval |
|-------------|---------------|---------------|------------------------------|---|------------------------|
|             |               | Miscellaneous | EG-Konf.                     | Type Test Certific-<br>ates/Test Report | Lloyd's<br>Register    |

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=3NP1133-1JB12

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1JB12

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP1133-1JB12

#### **CAx-Online-Generator**

http://www.siemens.com/cax

#### **Tender specifications**

http://www.siemens.com/specifications





