SIEMENS

## Data sheet 3NP1163-1BC20

SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH3, 630 A, for Busbar system 8US 60 mm, Box terminal, 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 | 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 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 permissible | 60 kA |
| cut-off value I**2t,max. / 500 V | 5 400 000 A²·s |
| Power factor | |

| | |
|---|---|
| • at AC-22 B | 0.65 |
| • at AC-23 B | 0.35 |
| • with capacitive load | -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 | |
|---|---|
| Protection class IP | |
| • with closed switch / with cover or cable lug cover | IP40 |
| • with closed switch / without cover or cable lug cover | 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 | |
| • at AC / rated value / maximum | 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 |
| • 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 (Iq) | |
| • 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 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 | |
| • single or multi-stranded / minimum | 50 mm² |
| • single or multi-stranded / maximum | 300 mm² |
| • stranded / minimum | 50 mm² |
| • stranded / maximum | 300 mm² |
| Tightening torque / with screw-type terminals | |
| • minimum | 10 N·m |
| • maximum | 25 N·m |
| Type of connectable conductor cross-sections / of the laminated conductors / maximum | 20 x 32 mm |
| Type of electrical connection / for main current circuit | box terminal |

| Mechanical Design | |
|---|---|
| Height | 306 mm |
| Width | 249.4 mm |
| Depth | 160.5 mm |
| Mounting position | horizontal/vertical |
| Mounting type | busbar |
| Mounting type | |
| • floor mounting | No |
| • front mounting | No |
| • front mounting with 4-hole attachment | No |
| • front mounting with central attachment | No |
| • rail mounting | Yes |
| Busbar center-to-center spacing | 60 mm |
| Net weight | 6.84 kg |

| Environmental conditions | |
|---|---|
| Degree of pollution | 3 |
| Ambient temperature | |
| • during operation / minimum | -25 °C |
| • during operation / maximum | 55 °C |
| • during storage / minimum | -50 °C |
| • during storage / maximum | 80 °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 |
|---|---|---|---|---|---|
| CCC | UR | VDE | Miscellaneous | EG-Konf. | Type Test Certificates/Test Report |

| Test Certificates | Shipping Approval |
|---|---|
| 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?mlfb=3NP1163-1BC20

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3NP1163-1BC20

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1163-1BC20

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

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