SIEMENS

Data sheet 3NP1143-1JC20



SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH1, 250 A, for Rittal busbar system 60 mm, Box terminal, Cover level 32/70 mm

| Model | | |
|---------------------------------------------------------------------------------------|--------------------------------|--|
| product designation | 3NP1 fuse switch disconnector | |
| busbar design | busbar thickness 5 or 10 mm | |
| design of the safety monitoring | Without | |
| 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 60 mm busbar system | |
| size of disconnecting link | 1 and 0 | |
| size of fuse link | NH0, NH1 | |
| let-through current with closed switch maximum | 32 kA | |
| mechanical service life (operating cycles) typical | 1 600 | |
| I2t value with closed switch maximum | 780 kA2.s | |
| power factor | | |
| • at AC-22 B | 0.65 | |
| • at AC-23 B | 0.45 | |
| with capacitive load | -0.25 | |
| fuse system | LV HRC fuse | |
| degree of pollution | 3 | |
| Voltage | | |
| insulation voltage | | |
| • rated value | 690 V | |
| with degree of pollution 3 at AC rated value | 690 V | |
| with degree of pollution 2 at AC rated value | 1 000 V | |
| power factor at AC-21 B | 0.95 | |
| surge voltage resistance rated value | 8 kV | |
| operating voltage | | |
| at AC rated value maximum | 690 V | |
| at DC rated value | 440 V | |
| at DC rated value maximum | 440 V | |
| 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 | |
| • open | IP20 | |
| Dissipation | | |
| power loss [W] | | |
| with conventional rated thermal current without fuse per pole | 8 W | |

| with conventional rated thermal current without fuse per device | 24 W |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| • for rated value of the current at AC in hot operating state | 31 W |
| per pole • of the fuse per fuse maximum | 23 W |
| operational current | 23 W |
| at 35 °C rated value | 250 A |
| at 40 °C rated value | 245 A |
| • at 45 °C rated value | 240 A |
| • at 50 °C rated value | 233 A |
| at 50 °C rated value at 55 °C rated value | 233 A |
| at AC-21 B at 240 V rated value | 250 A |
| | |
| at AC-21 B at 400 V rated value at AC-24 B at 500 V rated value | 250 A |
| at AC-21 B at 500 V rated value at AC-24 B at 500 V rated value | 250 A |
| at AC-21 B at 690 V rated value at AC-23 B at 340 V rated value | 250 A |
| at AC-22 B at 240 V rated value AC-22 B at 400 V rated value | 250 A |
| at AC-22 B at 400 V rated value | 250 A |
| at AC-22 B at 500 V rated value | 250 A |
| at AC-22 B at 690 V rated value | 250 A |
| • at AC-23 B at 690 V rated value | 100 A |
| at AC-23 B at 500 V rated value | 200 A |
| at AC-23 B at 400 V rated value | 250 A |
| • at AC-23 B at 240 V rated value | 250 A |
| • at DC-21 B at 120 V rated value | 250 A |
| • at DC-21 B at 240 V rated value | 250 A |
| • at DC-21 B at 440 V rated value | 250 A |
| at DC-22 B at 120 V rated value | 250 A |
| at DC-22 B at 240 V rated value | 250 A |
| at DC-22 B at 440 V rated value | 200 A |
| • at DC-23 B at 120 V rated value | 200 A |
| at DC-23 B at 240 V rated value | 200 A |
| at DC-23 B at 440 V rated value | 100 A |
| let-through current with high-speed activation maximum permissible | 25 kA |
| Main circuit | |
| operational current | |
| -F | |
| • rated value | 250 A |
| · | 250 A 72 A |
| • rated value | |
| rated valuewith capacitive load at 400 V rated value | 72 A |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value | 72 A |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit | 72 A 55 A |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts | 72 A 55 A 0 |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts | 72 A 55 A 0 0 |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts | 72 A 55 A 0 0 |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability | 72 A 55 A 0 0 |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability for use | 72 A 55 A 0 0 0 |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability for use main switch | 72 A 55 A 0 0 0 0 |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability or use main switch switch disconnector | 72 A 55 A 0 0 0 0 No Yes |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability for use main switch switch disconnector EMERGENCY OFF switch | 72 A 55 A 0 0 0 No Yes No |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability for use main switch switch disconnector EMERGENCY OFF switch safety switch | 72 A 55 A 0 0 0 No Yes No Yes |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability or use main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Product details | 72 A 55 A 0 0 0 No Yes No Yes |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability suitability or use main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Product details product component | 72 A 55 A 0 0 0 Vo Yes No Yes Yes |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability for use main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Product details product component undervoltage release | 72 A 55 A 0 0 0 No Yes No Yes Yes |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability suitability for use main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Product details product component undervoltage release undervoltage release with leading contact | 72 A 55 A 0 0 0 Ves No Yes Yes Yes Yes |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability suitability for use main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Product details product component undervoltage release undervoltage release with leading contact product feature sealable | 72 A 55 A 0 0 0 Ves No Yes Yes Yes |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability suitability or use main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Product details product component undervoltage release undervoltage release with leading contact product feature sealable product extension auxiliary switch | 72 A 55 A 0 0 0 Ves No Yes Yes Yes Yes |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability suitability or use main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Product details product component undervoltage release undervoltage release with leading contact product extension auxiliary switch product extension optional | 72 A 55 A 0 0 0 0 No Yes No Yes Yes Yes Yes Yes |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability suitability for use main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Product details product component undervoltage release undervoltage release with leading contact product feature sealable product extension auxiliary switch product extension optional locking capability | 72 A 55 A 0 0 0 0 No Yes No Yes Yes Yes Yes Yes |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability suitability for use main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Product details product component undervoltage release undervoltage release with leading contact product feature sealable product extension auxiliary switch product extension optional locking capability phase failure monitoring | 72 A 55 A 0 0 0 0 No Yes No Yes Yes Yes Yes Yes Yes |
| rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts Suitability suitability suitability for use main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Product details product component undervoltage release undervoltage release with leading contact product feature sealable product extension auxiliary switch product extension optional locking capability | 72 A 55 A 0 0 0 0 No Yes No Yes Yes Yes Yes Yes |

| overvoltage protection monitoring | Yes |
|----------------------------------------------------------------------------------|---------------------|
| Product function | |
| product function overvoltage protection monitoring | No |
| Connections | |
| arrangement of electrical connectors for main current circuit | other |
| connectable conductor cross-section for main contacts | |
| solid or stranded minimum | 70 mm² |
| solid or stranded maximum | 185 mm² |
| stranded minimum | 70 mm² |
| stranded maximum | 185 mm² |
| tightening torque with screw-type terminals | |
| • minimum | 10 N·m |
| • maximum | 10 N·m |
| type of connectable conductor cross-sections of the laminated conductors maximum | 20 x 10 mm |
| type of connection technology | Box terminal |
| Mechanical Design | |
| height | 306 mm |
| width | 183.7 mm |
| width of the busbar | |
| • minimum | 12 mm |
| • maximum | 30 mm |
| depth | 138 mm |
| fastening method | busbar |
| fastening method | |
| • floor mounting | No |
| • rail mounting | Yes |
| mounting position | horizontal/vertical |
| busbar center-to-center spacing | 60 mm |
| net weight | 2.85 kg |
| Environmental conditions | |
| ambient temperature during operation | |
| • minimum | -25 °C |
| • maximum | 55 °C |
| ambient temperature during storage | |
| • minimum | -50 °C |
| • maximum | 80 °C |
| Certificates | |
| reference code according to IEC 81346-2 | Q |
| Approvals Certificates | |
| | Declaration of Con- |

General Product Approval

Declaration of Conformity



Confirmation



Miscellaneous



C E

Declaration of Conformity

Test Certificates

Marine / Shipping

other

UK CA Type Test Certificates/Test Report

Special Test Certificate





Miscellaneous

other Environment

Confirmation

Environmental Confirmations

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3NP1143-1JC20

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

https://support.industry.siemens.com/cs/ww/en/ps/3NP1143-1JC20

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

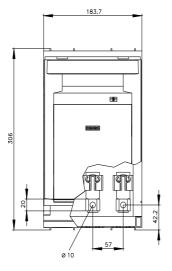
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1JC20

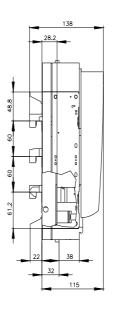
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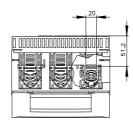
http://www.siemens.com/cax

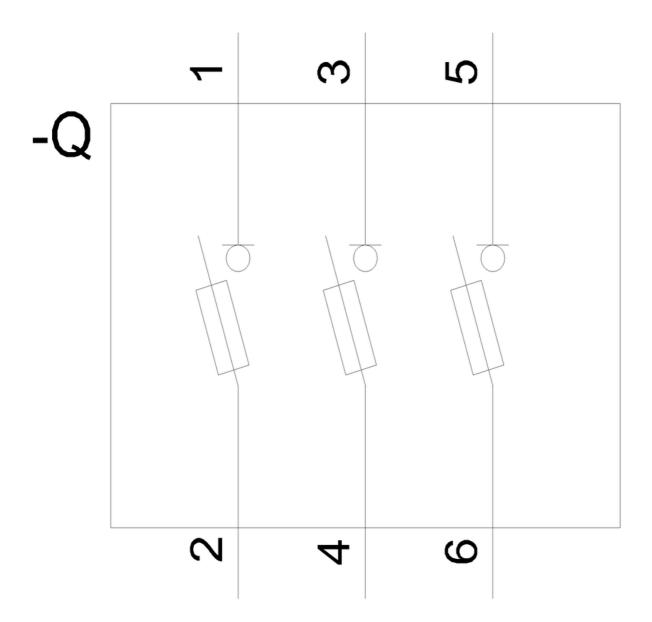
Tender specifications

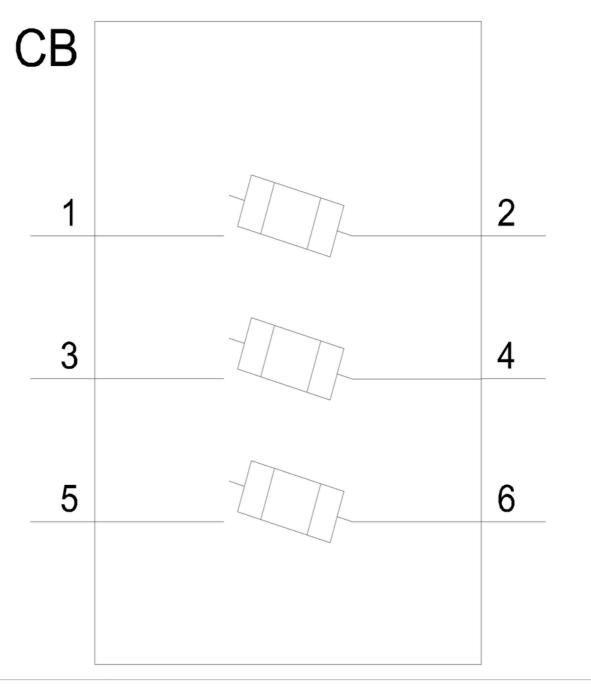
http://www.siemens.com/specifications











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