SIEMENS

Data sheet 3NP1153-1DA10



SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH2, 400 A, for assembly and installation on mounting plate, flat terminal, cover level 70 $\,\mathrm{mm}$

| Model | | |
|--|---|--|
| product designation | Fuse switch disconnector | |
| 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 assembly and installation on mounting plate | |
| size of disconnecting link | 2 and 1 | |
| size of fuse link | NH1, NH2 | |
| let-through current with closed switch maximum | 40 kA | |
| mechanical service life (operating cycles) typical | 1 000 | |
| I2t value with closed switch maximum | 2 150 kA2.s | |
| power factor | | |
| • at AC-22 B | 0.65 | |
| • at AC-23 B | 0.35 | |
| 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 | |
| operational current | | |
| • at 35 °C rated value | 400 A | |
| • at 40 °C rated value | 400 A | |
| • at 45 °C rated value | 392 A | |
| • at 50 °C rated value | 372 A | |
| • at 55 °C rated value | 356 A | |
| • at AC-21 B at 240 V rated value | 400 A | |
| • at AC-21 B at 400 V rated value | 400 A | |
| • at AC-21 B at 500 V rated value | 400 A | |
| • at AC-21 B at 690 V rated value | 400 A | |
| • at AC-22 B at 240 V rated value | 400 A | |
| • at AC-22 B at 400 V rated value | 400 A | |
| • at AC-22 B at 500 V rated value | 400 A | |
| at AC-22 B at 690 V rated value | 400 A | |

| at AC-23 B at 690 V rated value | 125 A |
|--|--|
| • at AC-23 B at 500 V rated value | 315 A |
| • at AC-23 B at 400 V rated value | 400 A |
| • at AC-23 B at 240 V rated value | 400 A |
| • at DC-21 B at 120 V rated value | 400 A |
| • at DC-21 B at 240 V rated value | 400 A |
| • at DC-21 B at 440 V rated value | 400 A |
| • at DC-22 B at 120 V rated value | 400 A |
| • at DC-22 B at 240 V rated value | 400 A |
| • at DC-22 B at 440 V rated value | 315 A |
| • at DC-23 B at 120 V rated value | 250 A |
| • at DC-23 B at 240 V rated value | 250 A |
| at DC-23 B at 440 V rated value | 160 A |
| let-through current with high-speed activation maximum permissible | 40 kA |
| 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 | 14 W |
| with conventional rated thermal current without fuse per device | 42 W |
| for rated value of the current at AC in hot operating state per pole | 48 W |
| per pore | |
| | 34 W |
| of the fuse per fuse maximum Main circuit | 34 W |
| of the fuse per fuse maximum | 34 W |
| • of the fuse per fuse maximum Main circuit | 34 W 400 A |
| of the fuse per fuse maximum Main circuit operational current | |
| of the fuse per fuse maximum Main circuit operational current rated value | 400 A |
| of the fuse per fuse maximum Main circuit operational current rated value with capacitive load at 400 V rated value with capacitive load at 500 V rated value | 400 A 72 A |
| of the fuse per fuse maximum Main circuit operational current | 400 A 72 A 55 A |
| of the fuse per fuse maximum Main circuit operational current • 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 | 400 A 72 A |
| of the fuse per fuse maximum Main circuit operational current • 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 | 400 A 72 A 55 A |
| of the fuse per fuse maximum Main circuit operational current • 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 | 400 A 72 A 55 A |
| of the fuse per fuse maximum Main circuit operational current | 400 A 72 A 55 A 0 0 |
| of the fuse per fuse maximum Main circuit operational current | 400 A 72 A 55 A 0 0 0 No |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use switch disconnector | 400 A 72 A 55 A 0 0 0 Ves |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use switch disconnector suitability for use EMERGENCY OFF switch | 400 A 72 A 55 A 0 0 0 Ves No |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use EMERGENCY OFF switch suitability for use safety switch | 400 A 72 A 55 A 0 0 0 Ves No Yes |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use switch disconnector suitability for use safety switch suitability for use safety switch suitability for use maintenance/repair switch | 400 A 72 A 55 A 0 0 0 Ves No |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use switch disconnector suitability for use EMERGENCY OFF switch suitability for use safety switch suitability for use maintenance/repair switch Product details | 400 A 72 A 55 A 0 0 0 Ves No Yes Yes Yes |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use EMERGENCY OFF switch suitability for use safety switch suitability for use maintenance/repair switch Product details product function phase failure monitoring | 400 A 72 A 55 A 0 0 0 Ves No Yes |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use switch disconnector suitability for use safety switch suitability for use maintenance/repair switch Product details product function phase failure monitoring product component | 400 A 72 A 55 A 0 0 0 Ves No Yes Yes Yes |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use switch disconnector suitability for use safety switch suitability for use safety switch suitability for use maintenance/repair switch Product details product function phase failure monitoring product component • undervoltage release | 400 A 72 A 55 A 0 0 0 Ves No Yes No Yes Yes |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use switch disconnector suitability for use EMERGENCY OFF switch suitability for use safety switch suitability for use maintenance/repair switch Product details product function phase failure monitoring product component • undervoltage release • undervoltage release with leading contact | 400 A 72 A 55 A 0 0 0 0 No Yes No Yes Yes No No No |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use switch disconnector suitability for use EMERGENCY OFF switch suitability for use safety switch suitability for use maintenance/repair switch Product details product function phase failure monitoring product component • undervoltage release • undervoltage release with leading contact product feature sealable | 400 A 72 A 55 A 0 0 0 0 Ves No Yes Yes No No Yes Yes |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use EMERGENCY OFF switch suitability for use safety switch suitability for use maintenance/repair switch Product details product function phase failure monitoring product component • undervoltage release • undervoltage release with leading contact product extension auxiliary switch | 400 A 72 A 55 A 0 0 0 0 No Yes No Yes Yes No No |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use EMERGENCY OFF switch suitability for use safety switch suitability for use maintenance/repair switch Product details product function phase failure monitoring product component • undervoltage release • undervoltage release with leading contact product extension auxiliary switch product extension optional | 400 A 72 A 55 A 0 0 0 0 Ves No Yes No Yes Yes Yes No No No No No Yes Yes |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use switch disconnector suitability for use EMERGENCY OFF switch suitability for use safety switch suitability for use maintenance/repair switch Product details product function phase failure monitoring product component • undervoltage release • undervoltage release with leading contact product extension auxiliary switch product extension auxiliary switch product extension optional • locking capability | 400 A 72 A 55 A 0 0 0 0 Ves No Yes Yes Yes Yes Yes Yes Yes |
| of the fuse per fuse maximum Main circuit operational current • 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 suitability for use SMERGENCY OFF switch suitability for use safety switch suitability for use maintenance/repair switch Product details product function phase failure monitoring product component • undervoltage release • undervoltage release with leading contact product feature sealable product extension auxiliary switch product extension optional • locking capability • phase failure monitoring | 400 A 72 A 55 A 0 0 0 0 Ves No Yes Yes Yes Yes Yes Yes Yes |
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| Product function | | |
|--|---------------------|--|
| product function overvoltage protection monitoring | No | |
| Short circuit | | |
| conditional short-circuit current (Iq) | | |
| • at AC at 240 V with high-speed activation rated value | 80 kA | |
| • at AC at 500 V with high-speed activation rated value | 80 kA | |
| • at AC at 690 V with high-speed activation rated value | 50 kA | |
| with closed switch at AC at 240 V rated value | 100 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 | | |
| solid or stranded minimum | 25 mm² | |
| solid or stranded maximum | 240 mm² | |
| stranded minimum | 25 mm² | |
| stranded maximum | 240 mm² | |
| tightening torque with screw-type terminals | | |
| • minimum | 10 N·m | |
| maximum | 12 N·m | |
| type of connectable conductor cross-sections of the laminated conductors maximum | 34 x 18 mm | |
| type of connection technology | Flat terminal | |
| Mechanical Design | | |
| height | 306 mm | |
| width | 209.4 mm | |
| depth | 130 mm | |
| fastening method | mounting plate | |
| fastening method | | |
| • floor mounting | Yes | |
| rail mounting | No | |
| mounting position | horizontal/vertical | |
| net weight | 4.21 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 | | |
| General Product Approval | | |







Confirmation





General Product Approval

Test Certificates

Marine / Shipping

Miscellaneous



Type Test Certificates/Test Report

Special Test Certific-<u>ate</u>





other Environment

Miscellaneous Confirmation Environmental Con-**Environmental Con-**

Information on the packaging

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=3NP1153-1DA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3NP1153-1DA10

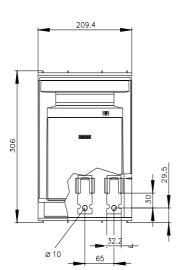
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1153-1DA10

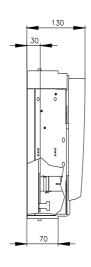
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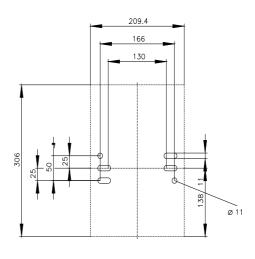
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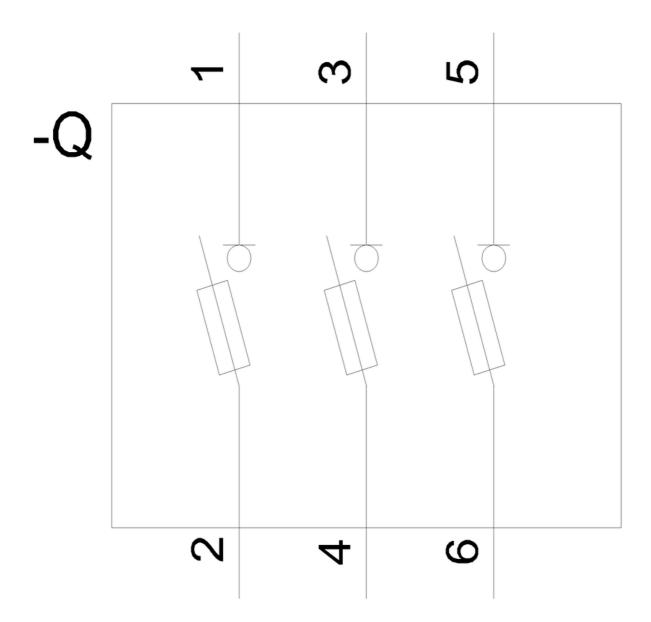
Tender specifications

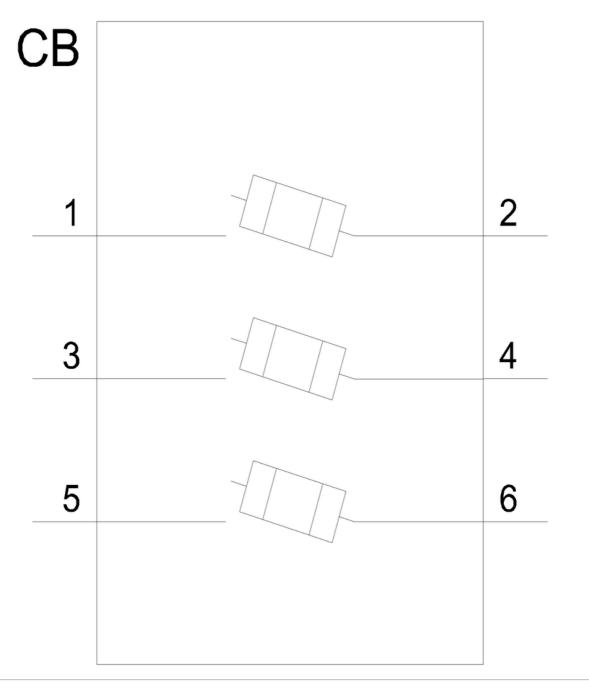
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