



SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH00, 160 A, for assembly and installation on mounting plate, Box terminal, Cover level 45 mm

| Model                                              |                                                 |
|----------------------------------------------------|-------------------------------------------------|
| product designation                                | Fuse switch disconnecter                        |
| 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                         | 00 and 000                                      |
| size of fuse link                                  | NH000, NH00                                     |
| let-through current with closed switch maximum     | 23 kA                                           |
| mechanical service life (operating cycles) typical | 2 000                                           |
| I <sup>2</sup> t value with closed switch maximum  | 223 kA <sup>2</sup> ·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                                            |
| • operational current                              |                                                 |
| — at 35 °C 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                                           |
| • operational current                              |                                                 |
| — at AC-21 B at 240 V rated value                  | 160 A                                           |
| — at AC-21 B at 400 V rated value                  | 160 A                                           |
| — at AC-21 B at 500 V rated value                  | 160 A                                           |
| — at AC-21 B at 690 V rated value                  | 160 A                                           |
| — at AC-22 B at 240 V rated value                  | 160 A                                           |

|                                                                        |       |
|------------------------------------------------------------------------|-------|
| — at AC-22 B at 400 V rated value                                      | 160 A |
| — at AC-22 B at 500 V rated value                                      | 160 A |
| — at AC-22 B at 690 V rated value                                      | 125 A |
| — at AC-23 B at 690 V rated value                                      | 35 A  |
| — at AC-23 B at 500 V rated value                                      | 63 A  |
| — at AC-23 B at 400 V rated value                                      | 160 A |
| — at AC-23 B at 240 V rated value                                      | 160 A |
| — at DC-21 B at 120 V rated value                                      | 160 A |
| — at DC-21 B at 240 V rated value                                      | 160 A |
| — at DC-21 B at 440 V rated value                                      | 160 A |
| — at DC-22 B at 120 V rated value                                      | 160 A |
| — at DC-22 B at 240 V rated value                                      | 160 A |
| — at DC-22 B at 440 V rated value                                      | 125 A |
| — at DC-23 B at 120 V rated value                                      | 100 A |
| — at DC-23 B at 240 V rated value                                      | 100 A |
| — at DC-23 B at 440 V rated value                                      | 63 A  |
| <b>let-through current with high-speed activation maximum</b>          | 15 kA |
| <b>operating voltage</b>                                               |       |
| • at AC rated value maximum                                            | 690 V |
| • at DC rated value                                                    | 440 V |
| • at DC rated value maximum                                            | 440 V |
| <b>Protection class</b>                                                |       |
| <b>protection class IP</b>                                             |       |
| • with closed switch with cover or cable lug cover                     | IP40  |
| • with closed switch without cover or cable lug cover                  | IP30  |
| • open                                                                 | IP20  |
| <b>Dissipation</b>                                                     |       |
| <b>power loss [W]</b>                                                  |       |
| • with conventional rated thermal current without fuse per pole        | 5 W   |
| • with conventional rated thermal current without fuse per device      | 15 W  |
| • for rated value of the current at AC in hot operating state per pole | 5.7 W |
| • of the fuse per fuse maximum                                         | 12 W  |
| <b>Main circuit</b>                                                    |       |
| <b>operational current</b>                                             |       |
| • rated value                                                          | 160 A |
| • with capacitive load at 400 V rated value                            | 72 A  |
| • with capacitive load at 500 V rated value                            | 55 A  |
| <b>Auxiliary circuit</b>                                               |       |
| <b>number of CO contacts for auxiliary contacts</b>                    | 0     |
| <b>number of NC contacts for auxiliary contacts</b>                    | 0     |
| <b>number of NO contacts for auxiliary contacts</b>                    | 0     |
| <b>Suitability</b>                                                     |       |
| <b>suitability for use main switch</b>                                 | No    |
| <b>suitability for use switch disconnecter</b>                         | Yes   |
| <b>suitability for use EMERGENCY OFF switch</b>                        | No    |
| <b>suitability for use maintenance/repair switch</b>                   | Yes   |
| <b>Product details</b>                                                 |       |
| <b>product function phase failure monitoring</b>                       | No    |
| <b>product component</b>                                               |       |
| • undervoltage release                                                 | No    |
| • undervoltage release with leading contact                            | No    |
| <b>product feature sealable</b>                                        | Yes   |
| <b>product extension auxiliary switch</b>                              | Yes   |
| <b>product extension optional locking capability</b>                   | Yes   |
| <b>product extension optional phase failure monitoring</b>             | Yes   |
| <b>product extension optional fuse monitoring</b>                      | Yes   |

|                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| product extension optional voltage trigger                                          | No                                                                                    |
| product extension optional overvoltage protection monitoring                        | Yes                                                                                   |
| Product function                                                                    |                                                                                       |
| product function overvoltage protection monitoring                                  | No                                                                                    |
| Short circuit                                                                       |                                                                                       |
| conditional short-circuit current (I <sub>q</sub> )                                 |                                                                                       |
| • 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                                     | 120 kA                                                                                |
| • with closed switch at AC at 500 V rated value                                     | 120 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                                                         | 6 mm <sup>2</sup>                                                                     |
| • solid or stranded maximum                                                         | 70 mm <sup>2</sup>                                                                    |
| • finely stranded with core end processing minimum                                  | 6 mm <sup>2</sup>                                                                     |
| • finely stranded with core end processing maximum                                  | 50 mm <sup>2</sup>                                                                    |
| • stranded minimum                                                                  | 6 mm <sup>2</sup>                                                                     |
| • stranded maximum                                                                  | 70 mm <sup>2</sup>                                                                    |
| 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    | 9 x 12 mm                                                                             |
| type of connection technology                                                       | Box terminal                                                                          |
| Mechanical Design                                                                   |                                                                                       |
| height                                                                              | 202 mm                                                                                |
| width                                                                               | 105.8 mm                                                                              |
| depth                                                                               | 86.5 mm                                                                               |
| fastening method                                                                    | mounting plate                                                                        |
| fastening method                                                                    |                                                                                       |
| • floor mounting                                                                    | Yes                                                                                   |
| • rail mounting                                                                     | No                                                                                    |
| mounting position                                                                   | horizontal/vertical                                                                   |
| Net Weight                                                                          | 798 g                                                                                 |
| 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                                                              |                                                                                       |
| Environment                                                                         | General Product Approval                                                              |
| <a href="#">Environmental Confirmations</a>                                         | <a href="#">Environmental Confirmations</a>                                           |
|  |    |
| CCC                                                                                 | cULus                                                                                 |
|                                                                                     |  |
|                                                                                     | VDE                                                                                   |
| <a href="#">Miscellaneous</a>                                                       |                                                                                       |
| General Product Approval                                                            | Test Certificates                                                                     |
| Maritime application                                                                |                                                                                       |



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Maritime application other



[Confirmation](#)

#### Further information

##### Information on the packaging

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

##### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

##### Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3NP1133-1CA20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1CA20>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1133-1CA20](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1CA20)

##### CAX-Online-Generator

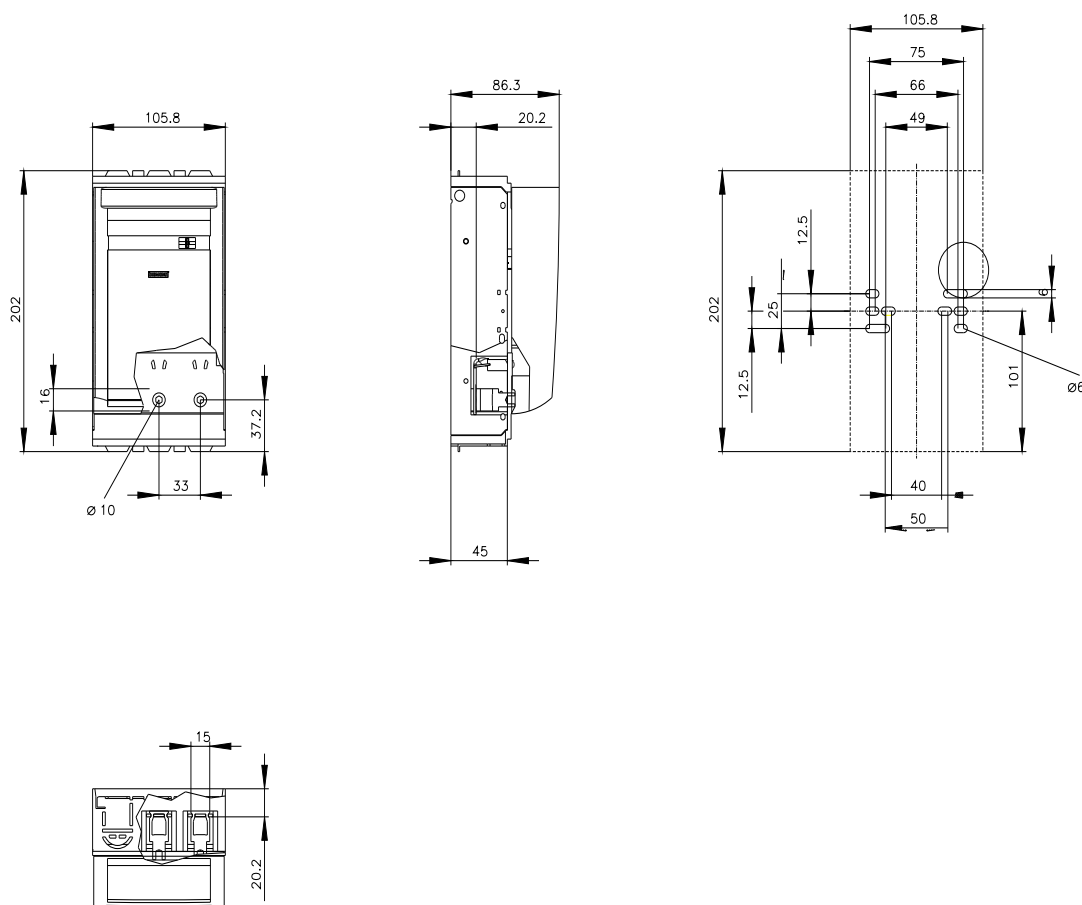
<https://www.siemens.com/cax>

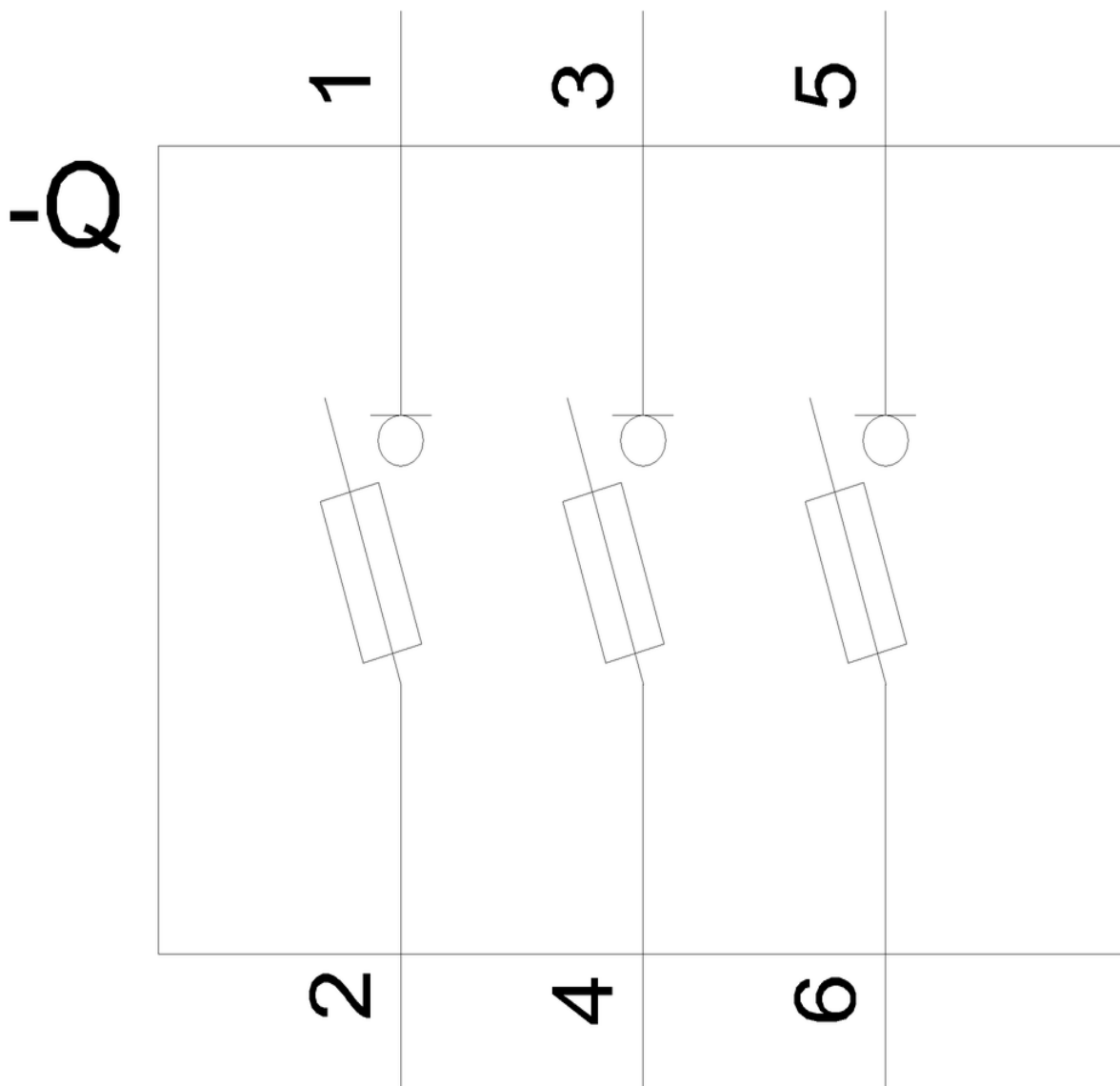
##### Tender specifications

<https://www.siemens.com/specifications>

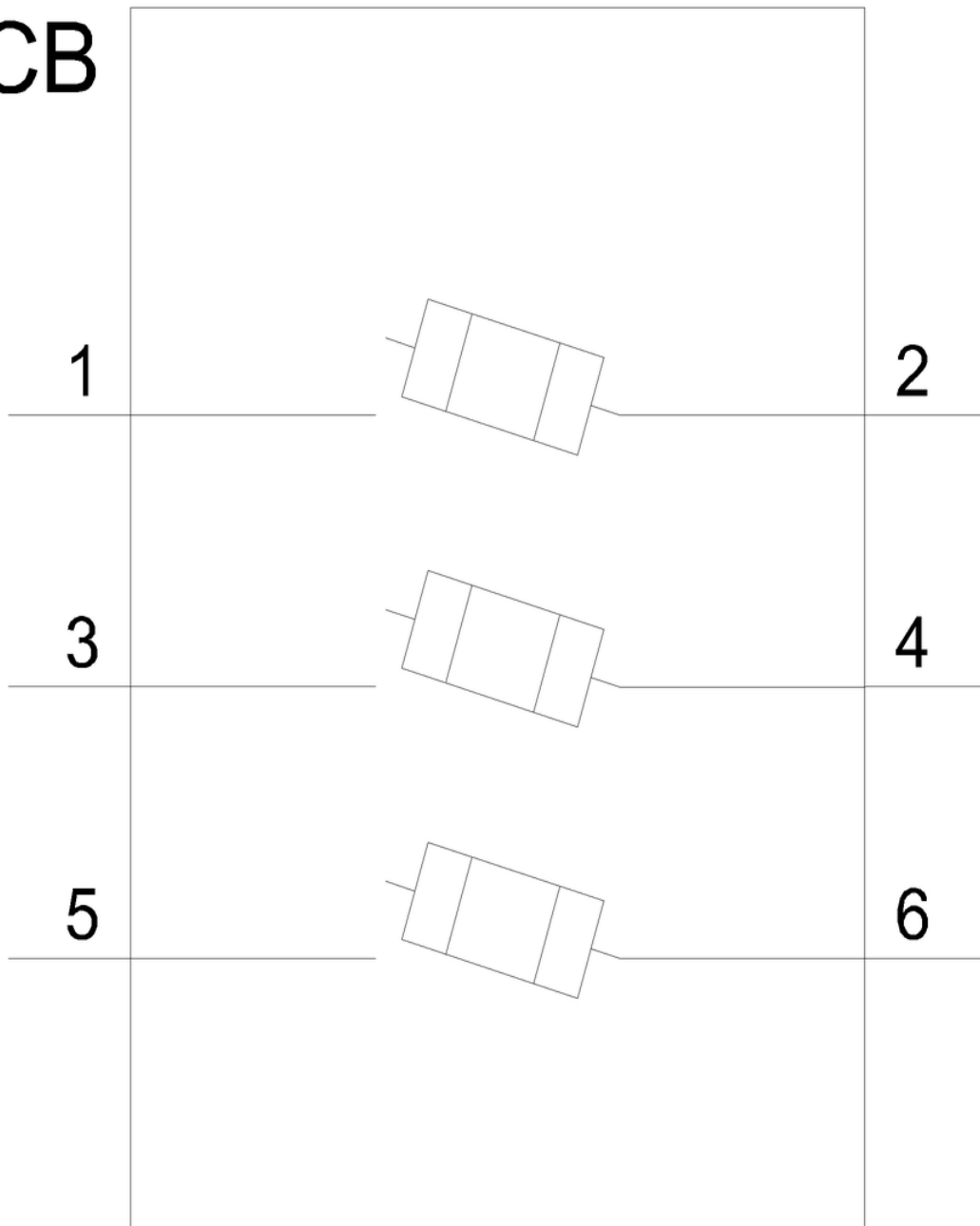
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<https://curves.simaris.siemens.com/curves/3NP1133-1CA20>





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