



SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH3, 630 A, for assembly and installation on mounting plate, flat terminal, Fuse monitoring: electronic EFM20, Cover level 70 mm

| Model  |   |
|--|---|
| product designation                                | Fuse switch disconnecter                        |
| design of the safety monitoring                    | electronic EFM 20                               |
| 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                         | 3 and 2   |
| size of fuse link                                  | NH2, NH3  |
| let-through current with closed switch maximum     | 60 kA   |
| mechanical service life (operating cycles) typical | 1 000   |
| I <sup>2</sup> t value with closed switch maximum  | 5 400 kA <sup>2</sup> ·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                                | 2   |
| 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                             | 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   |
| • operational current                              |   |
| — at AC-21 B at 240 V rated value                  | 630 A   |
| — at AC-21 B at 400 V rated value                  | 630 A   |
| — at AC-21 B at 500 V rated value                  | 630 A   |
| — at AC-21 B at 690 V rated value                  | 630 A   |
| — at AC-22 B at 240 V rated value                  | 630 A   |

|   |        |
|---|--------|
| — at AC-22 B at 400 V rated value   | 630 A  |
| — at AC-22 B at 500 V rated value   | 630 A  |
| — at AC-22 B at 690 V rated value   | 500 A  |
| — at AC-23 B at 690 V rated value   | 200 A  |
| — at AC-23 B at 500 V rated value   | 500 A  |
| — at AC-23 B at 400 V rated value   | 630 A  |
| — at AC-23 B at 240 V rated value   | 630 A  |
| <b>let-through current with high-speed activation maximum permissible</b> | 50 kA  |
| <b>operating voltage</b>  |        |
| • at AC rated value minimum   | 230 V  |
| • at AC rated value maximum   | 690 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           | 30 W   |
| • with conventional rated thermal current without fuse per device         | 90 W   |
| • for rated value of the current at AC in hot operating state per pole    | 36 W   |
| • of the fuse per fuse maximum  | 48 W   |
| <b>Main circuit</b>   |        |
| <b>operational current</b>  |        |
| • rated value   | 630 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 safety switch</b>                                  | Yes    |
| <b>suitability for use maintenance/repair switch</b>                      | Yes    |
| <b>Product details</b>  |        |
| <b>product function phase failure monitoring</b>                          | Yes    |
| <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 voltage trigger</b>                         | No     |
| <b>Product function</b>   |        |
| product function overvoltage protection monitoring                        | Yes    |
| <b>Short circuit</b>  |        |
| <b>conditional short-circuit current (I<sub>q</sub>)</b>                  |        |
| • at AC at 240 V with high-speed activation 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 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               |
| <b>connectable conductor cross-section for main contacts</b>                     |                     |
| • solid or stranded minimum  | 120 mm <sup>2</sup> |
| • solid or stranded maximum  | 300 mm <sup>2</sup> |
| • stranded minimum   | 120 mm <sup>2</sup> |
| • stranded maximum   | 300 mm <sup>2</sup> |
| <b>tightening torque with screw-type terminals</b>                               |                     |
| • minimum  | 10 N-m              |
| • maximum  | 12 N-m              |
| type of connectable conductor cross-sections of the laminated conductors maximum | 40 x 18 mm          |
| <b>type of connection technology</b>   | Flat terminal       |

| Mechanical Design        |                     |
|--------------------------|---------------------|
| <b>height</b>            | 306 mm              |
| <b>width</b>             | 249.4 mm            |
| <b>depth</b>             | 169.7 mm            |
| <b>fastening method</b>  | mounting plate      |
| <b>fastening method</b>  |                     |
| • floor mounting         | Yes                 |
| • rail mounting          | No                  |
| <b>mounting position</b> | horizontal/vertical |
| <b>Net Weight</b>        | 4.984 kg            |

| Environmental conditions                    |        |
|---|--------|
| <b>ambient temperature during operation</b> |        |
| • minimum                                   | -25 °C |
| • maximum                                   | 55 °C  |
| <b>ambient temperature during storage</b>   |        |
| • minimum                                   | -50 °C |
| • maximum                                   | 80 °C  |

| Certificates                                   |   |
|--|---|
| <b>reference code according to IEC 81346-2</b> | Q |

| Approvals Certificates |                                 |
|------------------------|---------------------------------|
| <b>Environment</b>     | <b>General Product Approval</b> |

[Environmental Con-  
firmations](#)

[Environmental Con-  
firmations](#)



[Miscellaneous](#)

**General Product Ap-  
proval**

**Maritime application**



### 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=3NP1163-1DA13>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1163-1DA13>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1163-1DA13](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1163-1DA13)

**CAX-Online-Generator**

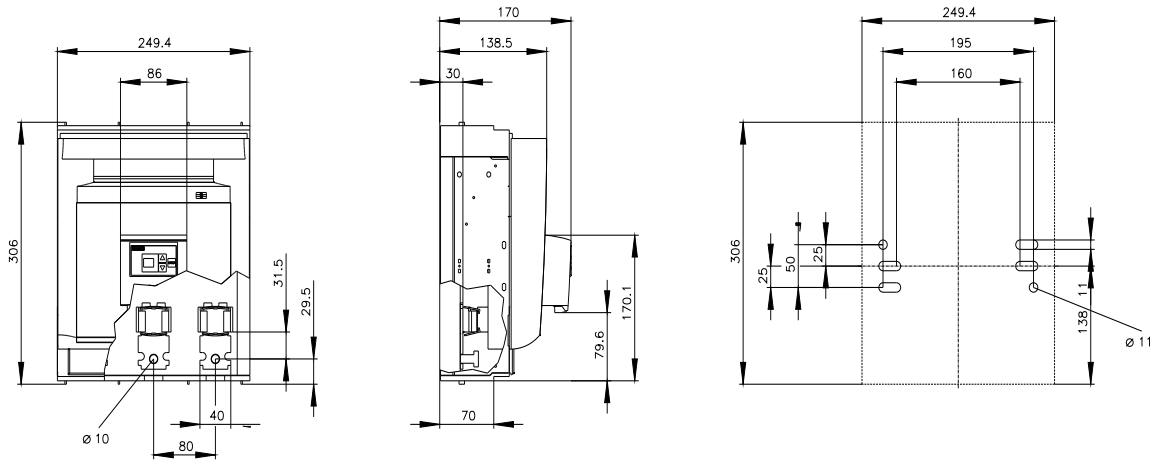
<https://www.siemens.com/cax>

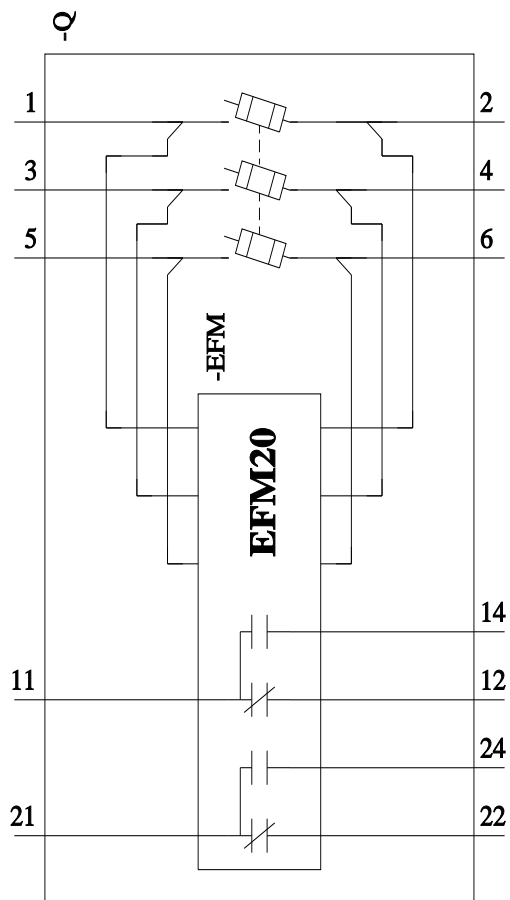
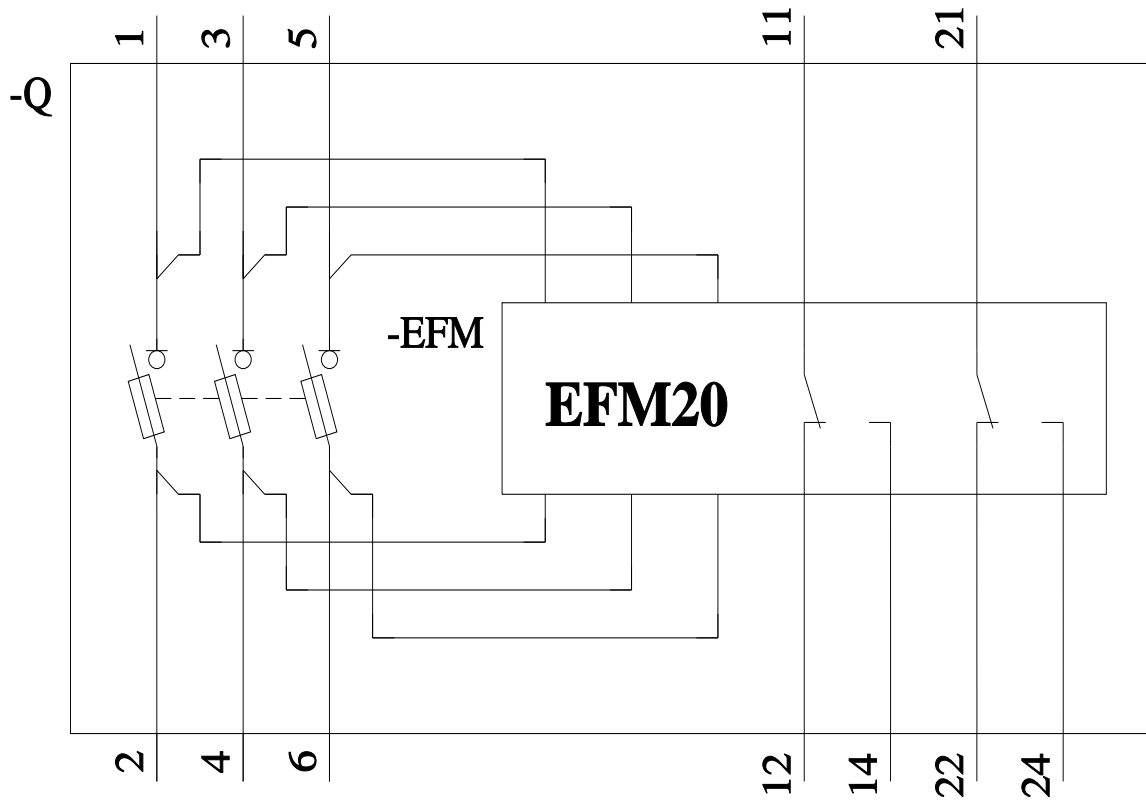
Tender specifications

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

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP='HAUPT'></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>)





last modified:

3/29/2026

