



switch disconnecter 3VA1 IEC frame 250 3-pole SD100, In=250A without overload protection w/o short-circuit protection nut keeper kit 1 auxiliary switch HP 1 trip alarm switch HP

| Model  |   |
|--|---|
| product brand name   | SENTRON                                     |
| product designation  | Molded case circuit breaker                 |
| product version  | General applications                        |
| design of the product  | in MCCB design                              |
| number of poles  | 3   |
| design of the auxiliary release  | Without auxiliary release                   |
| design of the auxiliary switch   | 1 auxiliary switch + 1 trip alarm switch HP |
| General technical data   |   |
| insulation voltage / rated value   | 800 V                                       |
| operating voltage / at DC / rated value  | 500 V                                       |
| operating voltage / at AC / rated value  | 690 V                                       |
| surge voltage resistance / rated value   | 8 kV  |
| power loss [W] / maximum   | 57 W  |
| mechanical service life (operating cycles) / typical                                     | 20 000                                      |
| type of device   | fixed mounting                              |
| suitability for use / switch disconnecter  | Yes   |
| suitability for use / main switch  | Yes   |
| suitability for use / safety switch  | Yes   |
| suitability for use / EMERGENCY OFF switch   | Yes   |
| suitability for use / maintenance/repair switch  | Yes   |
| product function / communication function  | No  |
| Net Weight   | 1.7 kg                                      |
| Current  |   |
| short-time withstand current (I <sub>cw</sub> ) / at AC / limited to 0.5 s / rated value | 3 kA  |
| operational current / rated value  | 250 A                                       |
| operational current  |   |
| • at 40 °C   | 250 A                                       |
| • at 45 °C   | 250 A                                       |
| • at 50 °C   | 250 A                                       |
| • at 55 °C   | 243 A                                       |
| • at 60 °C   | 237 A                                       |
| • at 65 °C   | 230 A                                       |
| • at 70 °C   | 223 A                                       |
| let-through I <sub>2t</sub> value / at AC-23 B   |   |
| • at 400 V / maximum permissible   | 1 810 000 A <sup>2</sup> ·s                 |
| • at 500 V / maximum permissible   | 1 660 000 A <sup>2</sup> ·s                 |
| • at 690 V / maximum permissible   | 1 140 000 A <sup>2</sup> ·s                 |

|   |                                      |
|---|--------------------------------------|
| let-through current (Ic) / at AC-23 B   |                                      |
| <ul style="list-style-type: none"> <li>• at 400 V / maximum permissible</li> <li>• at 500 V / maximum permissible</li> <li>• at 690 V / maximum permissible</li> </ul>  | 29 kA<br>18.7 kA<br>14.9 kA          |
| <b>Switching capacity according to IEC 60947</b>  |                                      |
| <b>short-circuit current making capacity (Icm) / with line-side fuse protection</b>   |                                      |
| <ul style="list-style-type: none"> <li>• at 690 V / by molded case circuit breaker / maximum</li> <li>• at 415 V / by molded case circuit breaker / maximum</li> </ul>  | 17 kA<br>154 kA                      |
| conditional short-circuit current (Iq) / rated value  | 3 000 A                              |
| <b>conditional short-circuit current (Iq) / with line-side fuse protection</b>  |                                      |
| <ul style="list-style-type: none"> <li>• at 690 V / by molded case circuit breaker / rated value</li> <li>• at 240 V / by LV HRC fuse link 3NA, 3ND (sizes 00/000, 1, 2, type gL/gG) / rated value</li> <li>• at 415 V / by LV HRC fuse link 3NA, 3ND (sizes 00/000, 1, 2, type gL/gG) / rated value</li> </ul> | 10 kA<br>100 kA<br>70 kA             |
| <b>Mechanical Design</b>  |                                      |
| overvoltage category  | IV                                   |
| fastening method  | screw fixing                         |
| fastening method / 4-hole front mounting  | Yes                                  |
| fastening method / front mounting with central attachment   | No                                   |
| fastening method / rail mounting  | No                                   |
| product component   |                                      |
| <ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• voltage trigger</li> <li>• undervoltage release with leading contact</li> <li>• trip indicator</li> </ul>  | No<br>No<br>No<br>Yes                |
| product feature / interlock   | No                                   |
| height  | 158 mm                               |
| width   | 105 mm                               |
| depth   | 70 mm                                |
| display version / for switch position indicator   | Handle switch position On, Trip, Off |
| design of the actuating element   | toggle handle                        |
| type of the driving mechanism / motor drive   | No                                   |
| <b>Connections</b>  |                                      |
| arrangement of electrical connectors / for main current circuit   | Front terminal                       |
| type of electrical connection / for main current circuit  | busbar connection                    |
| design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)  | silver                               |
| design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)   | Silver                               |
| <b>Auxiliary circuit</b>  |                                      |
| number of CO contacts / for auxiliary contacts  | 2                                    |
| number of NC contacts / for auxiliary contacts  | 0                                    |
| number of NO contacts / for auxiliary contacts  | 0                                    |
| <b>Accessories</b>  |                                      |
| product extension / auxiliary switch  | Yes                                  |
| product extension / optional / motor drive  | Yes                                  |
| <b>Environmental conditions</b>   |                                      |
| protection class IP / on the front  | IP40                                 |
| ambient temperature   |                                      |
| <ul style="list-style-type: none"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul>  | -25 °C<br>70 °C<br>-40 °C<br>80 °C   |
| reference code / according to IEC 81346-2   | Q                                    |
| <b>Approvals / Certificates</b>   |                                      |
| <b>General Product Approval</b>   |                                      |



[Miscellaneous](#)



[Confirmation](#)



|                          |     |                   |  |  |                      |
|--------------------------|-----|-------------------|--|--|----------------------|
| General Product Approval | EMV | Test Certificates |  |  | Maritime application |
|--------------------------|-----|-------------------|--|--|----------------------|



[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



|                      |       |  |  |  |  |
|----------------------|-------|--|--|--|--|
| Maritime application | other |  |  |  |  |
|----------------------|-------|--|--|--|--|



[Miscellaneous](#)

[Confirmation](#)

|       |             |  |  |  |  |
|-------|-------------|--|--|--|--|
| other | Environment |  |  |  |  |
|-------|-------------|--|--|--|--|



[Environmental Confirmations](#)

[Environmental Confirmations](#)

#### 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=3VA1225-1AA32-0AG0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1225-1AA32-0AG0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1225-1AA32-0AG0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1225-1AA32-0AG0)

##### CAX-Online-Generator

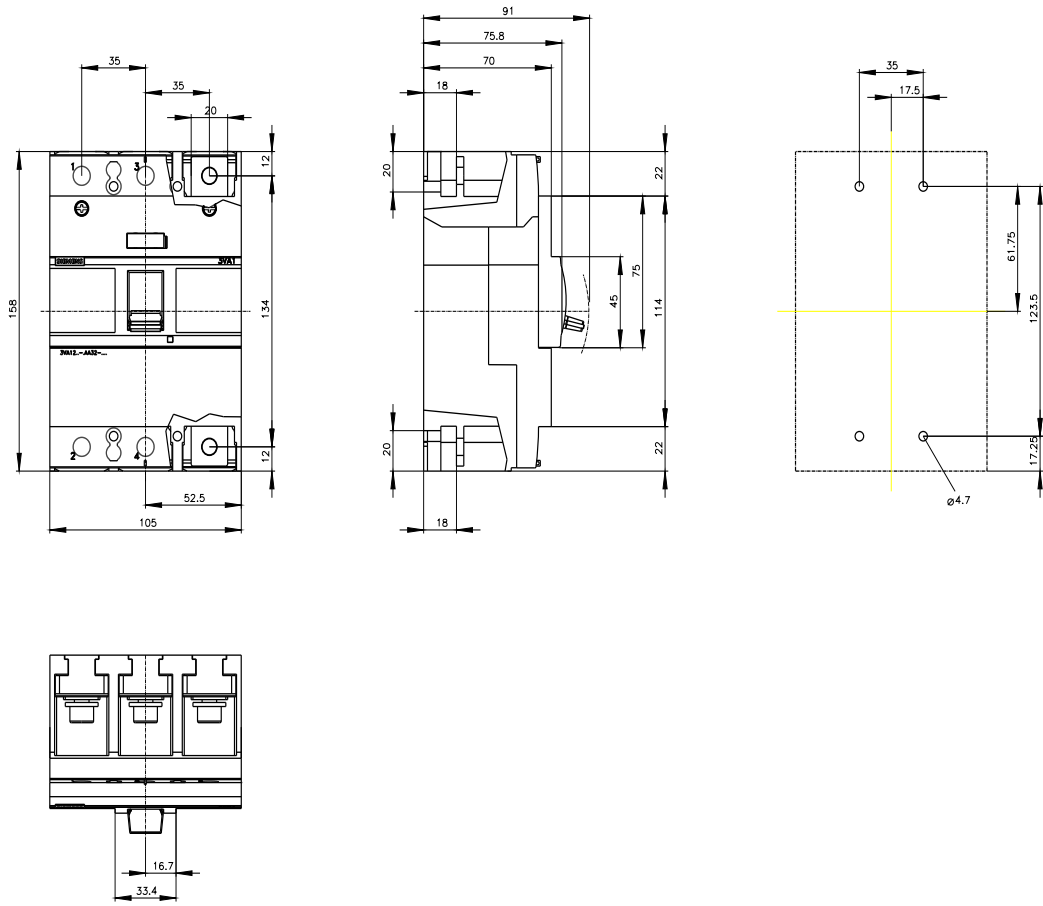
<https://www.siemens.com/cax>

##### Tender specifications

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

##### Characteristic curves

[https://curves.simarisiemens.com/curves/?mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simarisiemens.com/curves/?mmp_prod_noCOMP=)



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