



switch disconnecter 3VA1 IEC frame 160 3-pole SD100, In=100A without overload protection w/o short-circuit protection clamp connection 2 auxiliary switches 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                                                           | 2 auxiliary switches 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                                                                 | 38 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                                                                               | 0.96 kg                                                                                                                                                                                                                                        |
| Current                                                                                  |                                                                                                                                                                                                                                                |
| short-time withstand current (I <sub>cw</sub> ) / at AC / limited to 0.5 s / rated value | 2 kA                                                                                                                                                                                                                                           |
| operational current / rated value                                                        | 100 A                                                                                                                                                                                                                                          |
| operational current                                                                      | <ul style="list-style-type: none"> <li>• at 40 °C 100 A</li> <li>• at 45 °C 100 A</li> <li>• at 50 °C 100 A</li> <li>• at 55 °C 100 A</li> <li>• at 60 °C 100 A</li> <li>• at 65 °C 100 A</li> <li>• at 70 °C 100 A</li> </ul>                 |
| let-through I <sub>2t</sub> value / at AC-23 B                                           | <ul style="list-style-type: none"> <li>• at 400 V / maximum permissible 475 000 A<sup>2</sup>·s</li> <li>• at 500 V / maximum permissible 475 000 A<sup>2</sup>·s</li> <li>• at 690 V / maximum permissible 475 000 A<sup>2</sup>·s</li> </ul> |

|                                                                                          |                                      |
|------------------------------------------------------------------------------------------|--------------------------------------|
| let-through current (Ic) / at AC-23 B                                                    |                                      |
| • at 400 V / maximum permissible                                                         | 20 kA                                |
| • at 500 V / maximum permissible                                                         | 3 kA                                 |
| • at 690 V / maximum permissible                                                         | 3 kA                                 |
| <b>Switching capacity according to IEC 60947</b>                                         |                                      |
| <b>conditional short-circuit current (Iq) / with line-side fuse protection</b>           |                                      |
| • at 415 V / by LV HRC fuse link 3NA, 3ND (sizes 00/000, 1, 2, type gL/gG) / rated value | 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                                                                        |                                      |
| • undervoltage release                                                                   | No                                   |
| • voltage trigger                                                                        | No                                   |
| • undervoltage release with leading contact                                              | No                                   |
| • trip indicator                                                                         | No                                   |
| product feature / interlock                                                              | No                                   |
| height                                                                                   | 130 mm                               |
| width                                                                                    | 76.2 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                                 | Terminal 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                                                     | No                                   |
| product extension / optional / motor drive                                               | Yes                                  |
| <b>Environmental conditions</b>                                                          |                                      |
| protection class IP / on the front                                                       | IP40                                 |
| ambient temperature                                                                      |                                      |
| • during operation / minimum                                                             | -25 °C                               |
| • during operation / maximum                                                             | 70 °C                                |
| • during storage / minimum                                                               | -40 °C                               |
| • during storage / maximum                                                               | 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](#)



Maritime application

other



[CCS \(China Classification Society\)](#)

[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=3VA1110-1AA36-0AB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1110-1AA36-0AB0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1110-1AA36-0AB0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1110-1AA36-0AB0)

CAX-Online-Generator

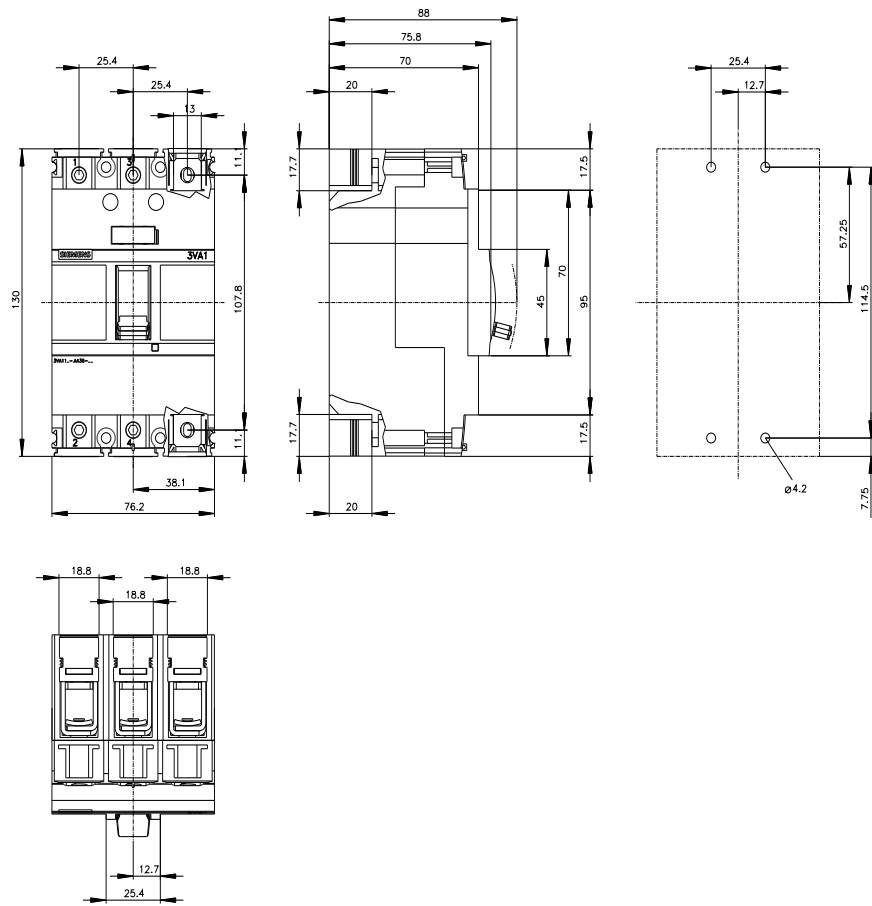
<https://www.siemens.com/cax>

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>)



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