



switch disconnecter 3VA1 IEC frame 160 3-pole SD100, In=100A without overload protection w/o short-circuit protection clamp connection

| Model                                                                       |                             |
|-----------------------------------------------------------------------------|-----------------------------|
| product brand name                                                          | SETRON                      |
| 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                     |
| design of the auxiliary switch                                              | Without                     |
| 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                                                                  | 918 g                       |
| Current                                                                     |                             |
| short-time withstand current (Icw) / at AC / limited to 0.5 s / rated value | 2 kA                        |
| operational current / rated value                                           | 100 A                       |
| operational current                                                         |                             |
| • at 40 °C                                                                  | 100 A                       |
| • at 45 °C                                                                  | 100 A                       |
| • at 50 °C                                                                  | 100 A                       |
| • at 55 °C                                                                  | 100 A                       |
| • at 60 °C                                                                  | 100 A                       |
| • at 65 °C                                                                  | 100 A                       |
| • at 70 °C                                                                  | 100 A                       |
| let-through I2t value / 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> | 475 000 A²·s |
| let-through current (I <sub>c</sub> ) / 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> | 20 kA        |
|                                                                                                                                                                        | 3 kA         |
|                                                                                                                                                                        | 3 kA         |

#### Switching capacity according to IEC 60947

|                                                                                                                                            |       |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <b>conditional short-circuit current (I<sub>q</sub>) / with line-side fuse protection</b>                                                  |       |
| <ul style="list-style-type: none"> <li>• at 415 V / by LV HRC fuse link 3NA, 3ND (sizes 00/000, 1, 2, type gL/gG) / rated value</li> </ul> | 70 kA |

#### Mechanical Design

|                                                                                                                                                                                    |                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 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                                   |
|                                                                                                                                                                                    | No                                   |
|                                                                                                                                                                                    | No                                   |
|                                                                                                                                                                                    | 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                                   |

#### Connections

|                                                                                       |                     |
|---------------------------------------------------------------------------------------|---------------------|
| 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              |

#### Auxiliary circuit

|                                                |   |
|------------------------------------------------|---|
| number of CO contacts / for auxiliary contacts | 0 |
| number of NC contacts / for auxiliary contacts | 0 |
| number of NO contacts / for auxiliary contacts | 0 |

#### Accessories

|                                            |     |
|--------------------------------------------|-----|
| product extension / auxiliary switch       | No  |
| product extension / optional / motor drive | Yes |

#### Environmental conditions

|                                                                                                                                                                                              |        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 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 |
|                                                                                                                                                                                              | 70 °C  |
|                                                                                                                                                                                              | -40 °C |
|                                                                                                                                                                                              | 80 °C  |
| reference code / according to IEC 81346-2                                                                                                                                                    | Q      |

#### Approvals / Certificates

|                                 |
|---------------------------------|
| <b>General Product Approval</b> |
|---------------------------------|



[Miscellaneous](#)



[Confirmation](#)



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| General Product Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | EMV                                                                               | Test Certificates                                                                 |                                                                                   |                                                                                     | Maritime application                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | <a href="#">Miscellaneous</a>                                                     | <a href="#">Special Test Certificate</a>                                          | <a href="#">Type Test Certificates/Test Report</a>                                  |  |
| Maritime application                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                     | other                                                                               |
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| other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Environment                                                                       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| <a href="#">Confirmation</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | <a href="#">Environmental Confirmations</a>                                       | <a href="#">Environmental Confirmations</a>                                       |  |  |
| Environment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
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| Further information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Information on the packaging<br><a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a><br>Information for data generation and storage<br><a href="https://support.industry.siemens.com/cs/ww/en/view/109995012">https://support.industry.siemens.com/cs/ww/en/view/109995012</a><br>Information- and Downloadcenter (Catalogs, Brochures,...)<br><a href="https://www.siemens.com/lowvoltage/catalogs">https://www.siemens.com/lowvoltage/catalogs</a><br>Industry Mall (Online ordering system)<br><a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA1110-1AA36-0AA0">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA1110-1AA36-0AA0</a><br>Service&Support (Manuals, Certificates, Characteristics, FAQs,...)<br><a href="https://support.industry.siemens.com/cs/ww/en/ps/3VA1110-1AA36-0AA0">https://support.industry.siemens.com/cs/ww/en/ps/3VA1110-1AA36-0AA0</a><br>Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)<br><a href="https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1110-1AA36-0AA0">https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1110-1AA36-0AA0</a><br>CAx-Online-Generator<br><a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a><br>Tender specifications<br><a href="https://www.siemens.com/specifications">https://www.siemens.com/specifications</a><br>Characteristic curves<br><a href="https://curves.simaris.siemens.com/curves/?mmp_prod_noCOMP='HAUPT'&amp;mmp_prod_no=">https://curves.simaris.siemens.com/curves/?mmp_prod_noCOMP="HAUPT"&gt;&lt;/mmp_prod_no&gt;</a> |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |





