



CIRCUIT-BREAKER SZ S00,  
FOR MOTOR PROTECTION, CLASS 10,  
A-REL. 0.7...1A, N-RELEASE 13A,  
SCREW CONNECTION,  
STANDARD SW. CAPACITY,  
W. TRANSVERSE AUX. SWITCH 1NO+1NC

| General technical data:  |  |
|--|--|
| product brand name   | SIRIUS   |
| Product designation  | 3RV2 circuit breaker   |
| Size of the circuit-breaker  | S00  |
| Size of contactor / can be combined / company-specific   | S0   |
| Number of poles / for main current circuit   | 3  |
| <b>Product function</b> <ul style="list-style-type: none"> <li>• Short circuit protection</li> <li>• overload protection</li> <li>• Phase failure detection</li> <li>• System protection</li> <li>• motor protection</li> <li>• motor protection with overload relay function</li> <li>• starter protection</li> <li>• Transformer protection</li> <li>• Disconnecter functionality</li> <li>• Main switches with supply disconnect function and EM-STOP switches</li> </ul> | <ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>No</li> <li>No</li> <li>No</li> <li>Yes</li> <li>No</li> </ul> |
| Design of the operating mechanism  | selector switch  |
| <b>Product component</b> <ul style="list-style-type: none"> <li>• Auxiliary switch</li> </ul>  | Yes  |

|  |    |             |
|--|----|-------------|
| • undervoltage release   |    | No          |
| • Trip indicator   |    | No          |
| <b>Product expansion</b>   |    |             |
| • Auxiliary switch   |    | Yes         |
| • optional / motor drive   |    | No          |
| <b>Insulation voltage / with degree of pollution 3 / Rated value</b> | V  | 690         |
| <b>Surge voltage resistance / Rated value</b>                        | kV | 6           |
| <b>Protection class IP</b>   |    |             |
| • of the terminal  |    | IP20        |
| • on the front   |    | IP20        |
| <b>Protection against electrical shock</b>                           |    | finger-safe |
| <b>Installation altitude / at height above sea level / maximum</b>   | m  | 2,000       |
| <b>Relative humidity</b>   |    |             |
| • during operation   | %  | 10 ... 95   |
| <b>Ambient temperature</b>   |    |             |
| • during transport   | °C | -50 ... +80 |
| • during storage   | °C | -50 ... +80 |
| • during operation   | °C | -20 ... +60 |
| <b>Shock resistance / acc. to IEC 60068-2-27</b>                     |    | 25g / 11 ms |
| <b>Usage category</b>  |    |             |
| • acc. to IEC 60947-4-1  |    | AC-3        |
| <b>Active power loss / total / typical</b>                           | W  | 6           |

#### Main circuit:

|   |    |           |
|---|----|-----------|
| <b>Operating current / Rated value</b>                      | A  | 1         |
| <b>Operating voltage / Rated value</b>                      | V  | 690       |
| <b>Type of voltage / for main current circuit</b>           |    | AC/DC     |
| <b>Operating frequency</b>                                  |    |           |
| • Rated value   | Hz | 50 ... 60 |
| <b>Operating current / at AC-3 / at 400 V / Rated value</b> | A  | 1         |

#### Hilfsstromkreis

|  |  |   |
|--|--|---|
| <b>Design of the fuse link / for short-circuit protection of the auxiliary switch / required</b> |  | Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current $I_k < 400$ A) |
|--|--|---|

#### Protective and monitoring functions:

|  |   |                  |
|--|---|------------------|
| <b>Type of protection</b>  |   | Increased safety |
| <b>Certificate of suitability / ATEX</b>   |   | Yes              |
| <b>Design of the overload circuit breaker</b>  |   | thermal          |
| <b>Adjustable response value current / of the current-dependent overload release</b> | A | 0.7 ... 1        |

|  |    |            |
|--|----|------------|
| <b>Trip class</b>  |    | CLASS 10   |
| <b>Design of the short-circuit trip</b>  |    | magnetic   |
| <b>Response value current / of the instantaneous short-circuit release</b>                         | A  | 13         |
| <b>Operational short-circuit current breaking capacity (Ics) / with AC</b>                         |    |            |
| • at 240 V / Rated value   | kA | 100        |
| • at 400 V / Rated value   | kA | 100        |
| • at 500 V / Rated value   | kA | 100        |
| • at 690 V / Rated value   | kA | 100        |
| <b>Maximum short-circuit current breaking capacity (Icu)</b>                                       |    |            |
| • with AC / at 240 V / Rated value   | kA | 100        |
| • with AC / at 400 V / Rated value   | kA | 100        |
| • with AC / at 500 V / Rated value   | kA | 100        |
| • with AC / at 690 V / Rated value   | kA | 100        |
| <b>Design of the fuse link / for IT network / for short-circuit protection of the main circuit</b> |    |            |
| • at 500 V   |    | gL/gG 10 A |
| • at 690 V   |    | gL/gG 10 A |
| <b>Breaking capacity short-circuit current (Icn)</b>   |    |            |
| • with 1 current path / for DC / at 150 V / Rated value  | kA | 10         |
| • with 2 current paths in series / for DC / at 300 V / Rated value                                 | kA | 10         |
| • with 3 current paths in series / for DC / at 450 V / Rated value                                 | kA | 10         |

#### Installation/ mounting/ dimensions:

|                          |    |  |
|--------------------------|----|--|
| <b>Mounting type</b>     |    | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| <b>mounting position</b> |    | any  |
| <b>Depth</b>             | mm | 96   |
| <b>Height</b>            | mm | 97   |
| <b>Width</b>             | mm | 45   |

#### Connections/ terminals:

|  |  |   |
|--|--|---|
| <b>Arrangement of electrical connectors / for main current circuit</b> |  | Top and bottom  |
| <b>Design of the electrical connection / for main current circuit</b>  |  | screw-type terminals  |
| <b>Type of connectable conductor cross-section</b>                     |  |   |
| • for main contacts  |  |   |
| • single or multi-stranded   |  | 2x (0,75 ... 2,5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>              |
| • finely stranded  |  |   |
| • with core end processing   |  | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) |
| • for AWG conductors / for main contacts                               |  | 2x (18 ... 14), 2x 12   |

|  |  |  |
|--|--|--|
| <b>Design of the electrical connection / for auxiliary and control current circuit</b>   |  | screw-type terminals   |
| <b>Type of connectable conductor cross-section</b>   |  |  |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>• single or multi-stranded</li> <li>• finely stranded <ul style="list-style-type: none"> <li>• with core end processing</li> </ul> </li> </ul> </li> <li>• for AWG conductors / for auxiliary contacts</li> </ul> |  | 2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> )<br><br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br><br>2x (20 ... 16), 2x (18 ... 14) |

| UL/CSA ratings:  |        |             |
|--|--------|-------------|
| <b>Operating voltage / acc. to UL 60947 / Rated value</b>  | V      | 600         |
| <b>Full-load current (FLA) / for three-phase AC motor</b>  |        |             |
| <ul style="list-style-type: none"> <li>• at 480 V / Rated value</li> <li>• at 600 V / Rated value</li> </ul> | A<br>A | 1<br>1      |
| <b>Contact rating / of the auxiliary contacts / acc. to UL</b>   |        | C300 / R300 |

### Certificates/ approvals:

| General Product Approval  | Declaration of Conformity  | Test Certificates  |
|---|--|--|
| <br>CCC | <br>EAC      | <br>UL           |
|   | <br>EG-Konf. | <a href="#">Special Test Certificate</a><br><br><a href="#">Type Test Certificates/Test Report</a> |

| Shipping Approval  |   |  |   |  |  |
|--|---|--|---|--|--|
| <br>ABS | <br>BUREAU VERITAS | <br>DNV | <br>GL | <br>LRS | <br>PRS |

| Shipping Approval   | other  |
|---|--|
| <br>RINA | <br>RMRS                                    |
|   | <a href="#">Confirmation</a><br><br><br>VDE |
|   | <a href="#">Environmental Confirmations</a>  |

### Further information:

- Information- and Downloadcenter (Catalogs, Brochures,...)**  
<http://www.siemens.com/industrial-controls/catalogs>

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- Industry Mall (Online ordering system)**  
<http://www.siemens.com/industrymall>

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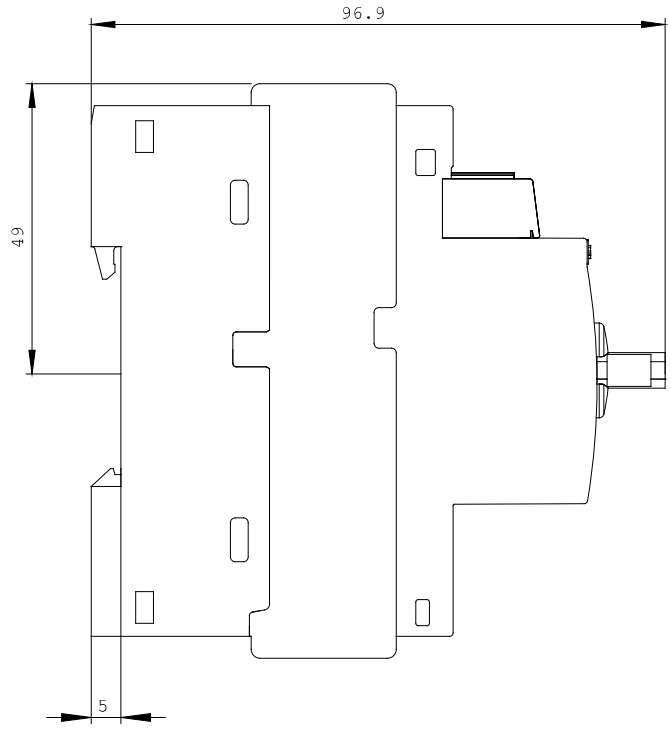
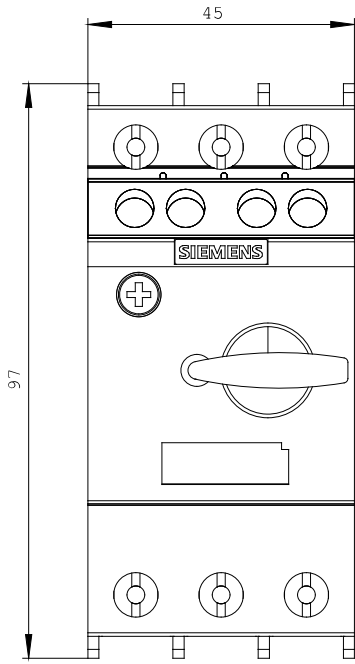
- Cax online generator**  
<http://www.siemens.com/cax>

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- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<http://support.automation.siemens.com/WWW/view/en/3RV2011-0JA15/all>

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- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV2011-0JA15](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-0JA15)



last change:

Dec 3, 2014