



CIRCUIT-BREAKER SZ S00,  
FOR MOTOR PROTECTION, CLASS 10,  
A-RELEASE 4.5...6.3A,  
N-RELEASE 82A SPRING-L. CONNECTION,  
STANDARD SW. CAPACITY

**General technical data:**

|  |                      |
|--|----------------------|
| <b>product brand name</b>  | SIRIUS               |
| <b>Product designation</b>   | 3RV2 circuit breaker |
| <b>Size of the circuit-breaker</b>                                   | S00                  |
| <b>Number of poles / for main current circuit</b>                    | 3                    |
| <b>Product function</b>  |                      |
| • Short circuit protection   | Yes                  |
| • overload protection  | Yes                  |
| • Phase failure detection  | Yes                  |
| • System protection  | Yes                  |
| • motor protection   | Yes                  |
| • motor protection with overload relay function                      | No                   |
| • starter protection   | No                   |
| • Transformer protection   | No                   |
| • Disconnecter functionality   | Yes                  |
| • Main switches with supply disconnect function and EM-STOP switches | No                   |
| <b>Design of the operating mechanism</b>                             | selector switch      |
| <b>Product component</b>   |                      |
| • Auxiliary switch   | No                   |
| • 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  | 6.7         |

#### Main circuit:

|   |    |           |
|---|----|-----------|
| <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  | 6.3       |

#### 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 | 4.5 ... 6.3      |
| <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 | 82               |
| <b>Operational short-circuit current breaking capacity (Ics) / with AC</b>           |   |                  |

|   |    |            |
|---|----|------------|
| <ul style="list-style-type: none"> <li>• at 240 V / Rated value</li> <li>• at 400 V / Rated value</li> <li>• at 500 V / Rated value</li> <li>• at 690 V / Rated value</li> </ul>  | kA | 100        |
|   | kA | 100        |
|   | kA | 100        |
|   | kA | 4          |
| <b>Maximum short-circuit current breaking capacity (I<sub>cu</sub>)</b>   |    |            |
| <ul style="list-style-type: none"> <li>• with AC / at 240 V / Rated value</li> <li>• with AC / at 400 V / Rated value</li> <li>• with AC / at 500 V / Rated value</li> <li>• with AC / at 690 V / Rated value</li> </ul>  | kA | 100        |
|   | kA | 100        |
|   | kA | 100        |
|   | kA | 6          |
| <b>Design of the fuse link / for IT network / for short-circuit protection of the main circuit</b>  |    |            |
| <ul style="list-style-type: none"> <li>• at 400 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>  |    | gL/gG 50 A |
|   |    | gL/gG 40 A |
|   |    | gL/gG 35 A |
| <b>Breaking capacity short-circuit current (I<sub>cn</sub>)</b>   |    |            |
| <ul style="list-style-type: none"> <li>• with 1 current path / for DC / at 150 V / Rated value</li> <li>• with 2 current paths in series / for DC / at 300 V / Rated value</li> <li>• with 3 current paths in series / for DC / at 450 V / Rated value</li> </ul> | kA | 10         |
|   | kA | 10         |
|   | 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 | 106  |
| <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>   |  | spring-loaded terminals           |
| <b>Type of connectable conductor cross-section</b>  |  |                                   |
| <ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>• single or multi-stranded</li> <li>• finely stranded <ul style="list-style-type: none"> <li>• without core end processing</li> <li>• with core end processing</li> </ul> </li> </ul> </li> <li>• for AWG conductors / for main contacts</li> </ul> |  | 2x (0,5 ... 4 mm <sup>2</sup> )   |
|   |  | 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
|   |  | 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
|   |  | 2x (20 ... 12)                    |

#### 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> </ul> | A | 6.3 |

• at 600 V / Rated value

A

6.3

### Certificates/ approvals:

#### General Product Approval



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

#### Shipping Approval



#### Shipping Approval

#### other



[Confirmation](#)



[other](#)

[Environmental Confirmations](#)

### Further information:

#### Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

#### Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

#### Cax online generator

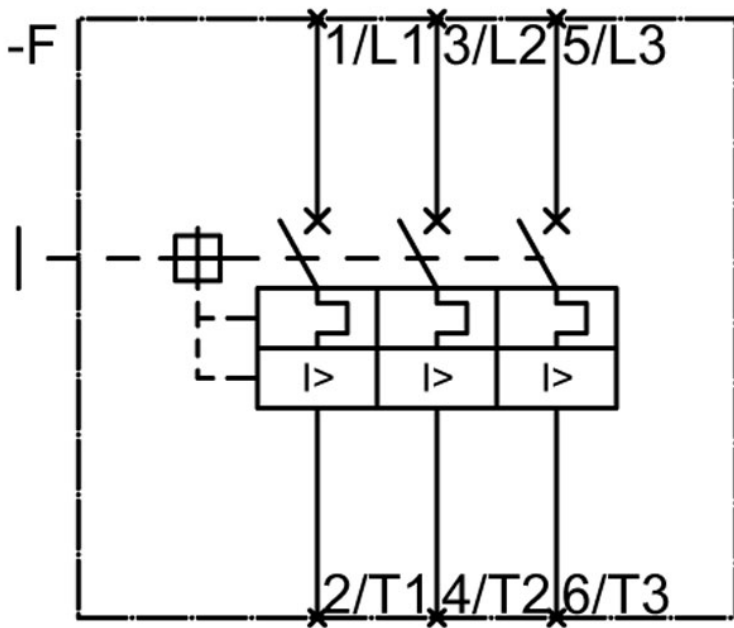
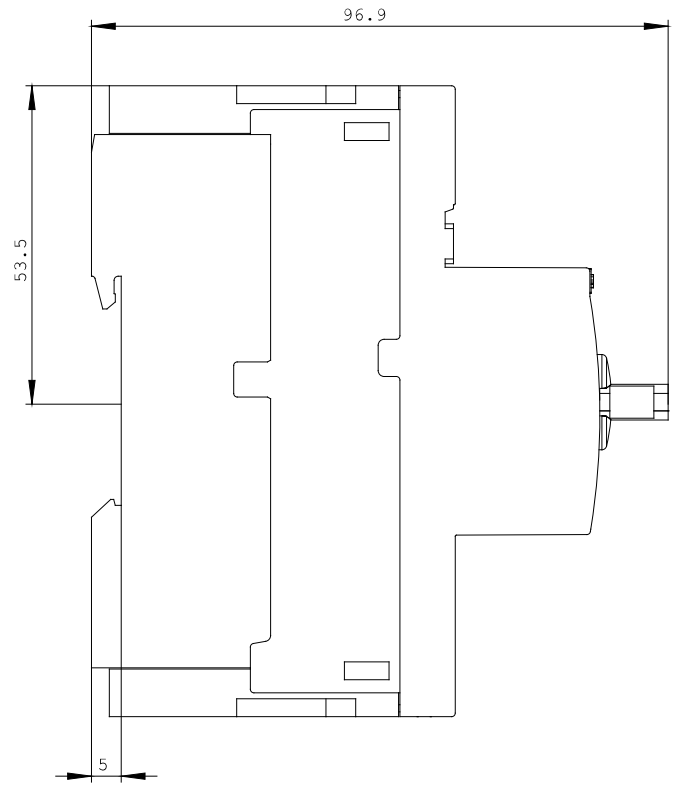
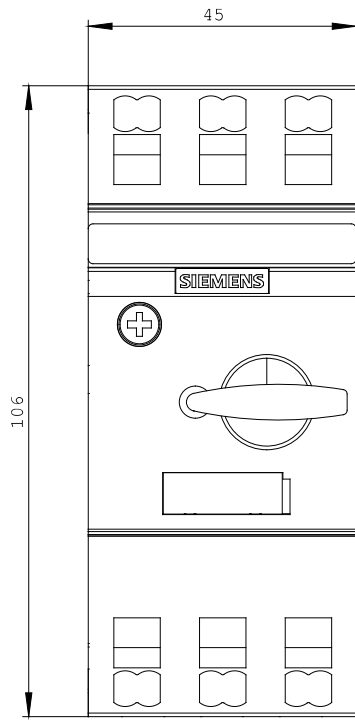
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RV2011-1GA20/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV2011-1GA20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-1GA20)



last change:

Nov 3, 2014