



CIRCUIT-BREAKER SZ S00, FOR TRANSFORMER PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 10 A, N-RELEASE 208 A, SCREW CONNECTION, STANDARD SW. CAPACITY

|                     |  |                      |
|---------------------|--|----------------------|
| product brand name  |  | SIRIUS               |
| Product designation |  | 3RV2 circuit breaker |

| General technical data:                           |    |             |
|---|----|-------------|
| <b>Active power loss total typical</b>            | W  | 7           |
| <b>Insulation voltage</b>                         |    |             |
| • with degree of pollution 3 Rated value          | V  | 690         |
| <b>Shock resistance</b>                           |    |             |
| • acc. to IEC 60068-2-27                          |    | 25g / 11 ms |
| <b>Surge voltage resistance Rated value</b>       | kV | 6           |
| <b>Mechanical service life (switching cycles)</b> |    |             |
| • of the main contacts typical                    |    | 100 000     |
| • of the auxiliary contacts typical               |    | 100 000     |
| <b>Electrical endurance (switching cycles)</b>    |    |             |
| • typical   |    | 100 000     |
| <b>Temperature compensation</b>                   | °C | -20 ... +60 |
| <b>Protection class IP</b>                        |    |             |
| • on the front                                    |    | IP20        |
| • of the terminal                                 |    | IP20        |
| <b>Equipment marking</b>                          |    |             |
| • acc. to DIN EN 81346-2                          |    | Q           |

| Main circuit:  |   |           |
|--|---|-----------|
| <b>Number of poles for main current circuit</b>                                    |   | 3         |
| <b>Adjustable response value current of the current-dependent overload release</b> | A | 10 ... 10 |
| <b>Operating voltage</b>   |   |           |

|                                 |     |           |
|---------------------------------|-----|-----------|
| • Rated value                   | V   | 690       |
| • at AC-3 Rated value maximum   | V   | 690       |
| Operating frequency Rated value | Hz  | 50 ... 60 |
| <b>Operating power</b>          |     |           |
| • at AC-3                       |     |           |
| — at 230 V Rated value          | W   | 2 200     |
| — at 400 V Rated value          | W   | 4 000     |
| — at 500 V Rated value          | W   | 5 500     |
| — at 690 V Rated value          | W   | 7 500     |
| <b>Operating frequency</b>      |     |           |
| • at AC-3 maximum               | 1/h | 15        |

#### Auxiliary circuit:

|   |  |     |
|---|--|-----|
| <b>Number of NC contacts</b>              |  |     |
| • for auxiliary contacts                  |  | 0   |
| <b>Number of NO contacts</b>              |  |     |
| • for auxiliary contacts                  |  | 0   |
| <b>Number of CO contacts</b>              |  |     |
| • for auxiliary contacts                  |  | 0   |
| <b>Product expansion Auxiliary switch</b> |  | Yes |

#### Protective and monitoring functions:

|  |    |         |
|--|----|---------|
| <b>Design of the overload circuit breaker</b>                            |    | thermal |
| <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 | 42      |
| • at 690 V Rated value   | kA | 4       |
| <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 | 42      |
| • with AC at 690 V Rated value   | kA | 6       |
| • at 480 AC Y/277 V acc. to UL 489 Rated value                           | A  | 65 000  |
| <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      |
| <b>Response value current of the instantaneous short-circuit release</b> | A  | 208     |

**Short-circuit:**

|  |  |  |
|--|--|--|
| <b>Product function Short circuit protection</b>   |  | Yes                                    |
| <b>Design of the short-circuit trip</b>  |  | magnetic                               |
| <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<br>gL/gG 40 A<br>gL/gG 40 A |

**Installation/ mounting/ dimensions:**

|  |    |   |
|--|----|---|
| <b>mounting position</b>   |    | any   |
| <b>Mounting type</b>   |    | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  |
| <b>Height</b>  | mm | 144   |
| <b>Width</b>   | mm | 45  |
| <b>Depth</b>   | mm | 97  |
| <b>Required spacing</b>  |    |   |
| <ul style="list-style-type: none"> <li>• with side-by-side mounting               <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts               <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts               <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul> | mm | 0<br>0<br>50<br>50<br>0<br><br>0<br>0<br>50<br>30<br>50<br><br>0<br>0<br>50<br>50<br>30 |

**Connections/ Terminals:**

|  |  |                      |
|--|--|----------------------|
| <b>Type of electrical connection</b>   |  |                      |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>                             |  | screw-type terminals |
| <b>Arrangement of electrical connectors for main current circuit</b>                                     |  | Top and bottom       |
| <b>Product function</b>  |  |                      |
| <ul style="list-style-type: none"> <li>• removable terminal for auxiliary and control circuit</li> </ul> |  | No                   |

|   |     |  |
|---|-----|--|
| <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 with core end processing</li> </ul> </li> <li>• for AWG conductors for main contacts</li> </ul> |     | 1 ... 10 mm <sup>2</sup> , max. 2x 10 mm <sup>2</sup><br>1 ... 16 mm <sup>2</sup> , max. 6 + 16 mm <sup>2</sup><br>2x 14 |
| <b>Tightening torque</b>  |     |  |
| <ul style="list-style-type: none"> <li>• for main contacts with screw-type terminals</li> </ul>   | N·m | 2.5 ... 3  |
| <b>Design of screwdriver shaft</b>  |     | Diameter 5 to 6 mm   |
| <b>Design of the thread of the connection screw</b>   |     |  |
| <ul style="list-style-type: none"> <li>• for main contacts</li> </ul>   |     | M4   |

#### Safety related data:

|   |     |             |
|---|-----|-------------|
| <b>B10 value with high demand rate acc. to SN 31920</b>   |     | 50 000      |
| <b>Proportion of dangerous failures</b>   |     |             |
| <ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> <li>• with high demand rate acc. to SN 31920</li> </ul> | %   | 40          |
|   | %   | 40          |
| <b>Failure rate [FIT] with low demand rate acc. to SN 31920</b>   | FIT | 50          |
| <b>T1 value for proof test interval or service life acc. to IEC 61508</b>   | y   | 10          |
| <b>Protection against electrical shock</b>  |     | finger-safe |

#### Mechanical data:

|                                    |  |     |
|------------------------------------|--|-----|
| <b>Size of the circuit-breaker</b> |  | S00 |
|------------------------------------|--|-----|

#### Ambient conditions:

|  |    |             |
|--|----|-------------|
| <b>Installation altitude at height above sea level maximum</b>   | m  | 2 000       |
| <b>Ambient temperature</b>   |    |             |
| <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul> | °C | -20 ... +60 |
|  | °C | -50 ... +80 |
|  | °C | -50 ... +80 |
| <b>Relative humidity during operation</b>  | %  | 10 ... 95   |

#### Display:

|  |  |        |
|--|--|--------|
| <b>Display version</b>   |  |        |
| <ul style="list-style-type: none"> <li>• for switching status</li> </ul> |  | Handle |

#### Certificates/ approvals:

|                          |                           |                   |
|--------------------------|---------------------------|-------------------|
| General Product Approval | Declaration of Conformity | Test Certificates |
|--------------------------|---------------------------|-------------------|



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

|                   |
|-------------------|
| Shipping Approval |
|-------------------|



|                   |       |
|-------------------|-------|
| Shipping Approval | other |
|-------------------|-------|



[Confirmation](#)

[Environmental Confirmations](#)



[other](#)

|                     |
|---------------------|
| 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**

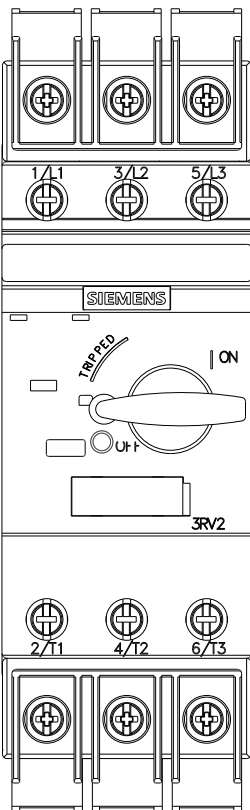
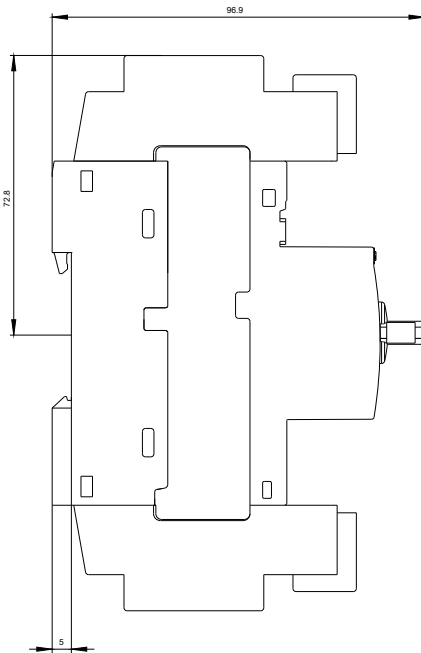
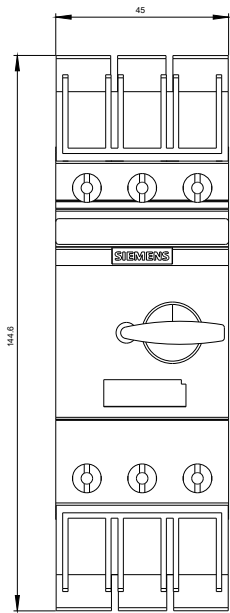
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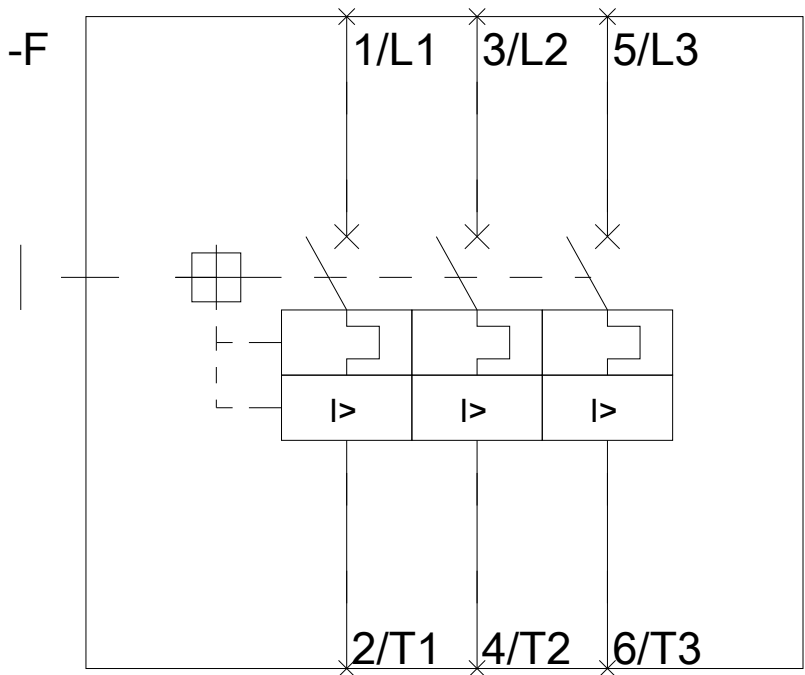
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<http://support.automation.siemens.com/WW/view/en/3RV28111JD10/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RV28111JD10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RV28111JD10&lang=en)





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