



CIRCUIT-BREAKER SZ S00,  
FOR MOTOR PROTECTION, CLASS 10,  
W. OVERLOAD RELAY FUNCTION A-RELEASE  
0.22...0.32A,  
N-RELEASE 4.2A SCREW CONNECTION,  
STANDARD SW. CAPACITY

### General technical data:

|                                                        |    |                      |
|--------------------------------------------------------|----|----------------------|
| product brand name                                     |    | SIRIUS               |
| product designation                                    |    | 3RV2 circuit breaker |
| Size of the circuit-breaker                            |    | S00                  |
| Number of poles / for main current circuit             |    | 3                    |
| Product function                                       |    |                      |
| • removable terminal for auxiliary and control circuit |    | No                   |
| • overload protection                                  |    | Yes                  |
| • phase disturbance recognition                        |    | Yes                  |
| • short-circuit to earth recognition                   |    | No                   |
| Product component                                      |    |                      |
| • auxiliary switch                                     |    | Yes                  |
| • undervoltage release mechanism                       |    | No                   |
| • trip indicator                                       |    | No                   |
| Product extension                                      |    |                      |
| • auxiliary switch                                     |    | Yes                  |
| • optional / motor drive                               |    | No                   |
| Impulse voltage resistance / rated value               | kV | 6                    |
| Protection class IP / on the front                     |    | IP20                 |
| Protection against electrical shock                    |    | finger-safe          |

|                                                                     |    |             |
|---------------------------------------------------------------------|----|-------------|
| <b>Installation altitude / at a height over sea level / maximum</b> | m  | 2,000       |
| <b>Resistance against shock</b>                                     |    | 25g / 11 ms |
| <b>Ambient temperature</b>                                          |    |             |
| • during transport                                                  | °C | -50 ... +80 |
| • during storage                                                    | °C | -50 ... +80 |
| • during operating                                                  | °C | -20 ... +60 |
| <b>Active power loss / total / typical</b>                          | W  | 5           |

#### Main circuit:

|                                                                                       |     |         |
|---------------------------------------------------------------------------------------|-----|---------|
| <b>Operating voltage / rated value</b>                                                | V   | 690     |
| <b>Service power / at AC-3</b>                                                        |     |         |
| • at 400 V / rated value                                                              | W   | 90      |
| • at 500 V / rated value                                                              | W   | 120     |
| • at 690 V / rated value                                                              | W   | 120     |
| <b>Operational current / at AC-3 / at 400 V / rated value</b>                         | A   | 0.32    |
| <b>Mechanical operating cycles as operating time / of the main contacts / typical</b> |     | 100,000 |
| <b>Frequency of operation / at AC-3 / according to IEC 60947-6-2</b>                  | 1/h | 15      |

#### Auxiliary circuit:

|                                                                                                  |   |                              |
|--------------------------------------------------------------------------------------------------|---|------------------------------|
| <b>Design of the auxiliary switch</b>                                                            |   | laterally                    |
| <b>Number of change-over switches / for auxiliary contacts</b>                                   |   | 0                            |
| <b>Mechanical operating cycles as operating time / of the auxiliary contacts / typical</b>       |   | 100,000                      |
| <b>Design of the fuse link / for short-circuit protection of the auxiliary switch / required</b> |   | fuse gL/gG: 6 A, quick: 10 A |
| <b>Operating current / of the auxiliary contacts / at AC-15 / at 24 V</b>                        | A | 1.5                          |
| <b>Operating current / of the auxiliary contacts</b>                                             |   |                              |
| • at AC-15                                                                                       |   |                              |
| • at 230 V                                                                                       | A | 1.5                          |
| • at DC-13                                                                                       |   |                              |
| • at 24 V                                                                                        | A | 1                            |

#### Protection function:

|                                                                                |   |               |
|--------------------------------------------------------------------------------|---|---------------|
| <b>Trip class</b>                                                              |   | CLASS 10      |
| <b>Adjustable response current / of the current-dependent overload release</b> | A | 0.22 ... 0.32 |
| <b>Breaking capacity limit short-circuit current (I<sub>cu</sub>)</b>          |   |               |
| • at 400 V / rated value                                                       | A | 100,000       |
| • at 500 V / rated value                                                       | A | 100,000       |
| • at 690 V / rated value                                                       | A | 100,000       |

#### Safety:

|                                                                                    |                                                 |        |
|------------------------------------------------------------------------------------|-------------------------------------------------|--------|
| <b>Proportion of dangerous failures</b>                                            |                                                 |        |
|                                                                                    | • with high demand rate / according to SN 31920 | % 40   |
|                                                                                    | • with low demand rate / according to SN 31920  | % 40   |
| <b>Failure rate (FIT value) / with low demand rate / according to SN 31920</b>     | FIT                                             | 50     |
| <b>B10 value / with high demand rate / according to SN 31920</b>                   |                                                 | 50,000 |
| <b>T1 value / for proof test interval or service life / according to IEC 61508</b> | a                                               | 10     |

#### Installation/mounting/dimensions:

|                          |    |                                                                                        |
|--------------------------|----|----------------------------------------------------------------------------------------|
| <b>Type of mounting</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 | 65                                                                                     |

#### Connections:

|                                                                        |                                               |                                                                       |
|------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------|
| <b>Arrangement of electrical connectors / for main current circuit</b> |                                               | Top and bottom                                                        |
| <b>Design of the electrical connection</b>                             | • for main current circuit                    | screw-type terminals                                                  |
|                                                                        | • for auxiliary and control current circuit   | screw-type terminals                                                  |
| <b>Type of the connectable conductor cross-section</b>                 | • for main contacts                           |                                                                       |
|                                                                        | • solid                                       | 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>              |
|                                                                        | • finely stranded                             |                                                                       |
|                                                                        | • with conductor 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                                                 |
|                                                                        | • for auxiliary contacts                      |                                                                       |
|                                                                        | • solid                                       | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) |
|                                                                        | • finely stranded                             |                                                                       |
|                                                                        | • with conductor end processing               | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) |
|                                                                        | • for AWG conductors / for auxiliary contacts | 2x (20 ... 16), 2x (18 ... 14)                                        |

#### UL/CSA ratings:

|                                                                              |  |             |
|------------------------------------------------------------------------------|--|-------------|
| <b>Contact rating designation / for auxiliary contacts / according to UL</b> |  | C600 / R300 |
|------------------------------------------------------------------------------|--|-------------|

#### Certificates/approvals:

| General Product Approval                                                                  |                                                                                                     |                                                                                          | Declaration of Conformity                                                                     | Test Certificates                                                                          |                                                                                            |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <br>CSA  | <br>GOST           | <br>UL  | <br>EG-Konf. | <a href="#">Special Test Certificate</a>                                                   | <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           | <br>VDE | <a href="#">other</a>                                                                         |                                                                                            |                                                                                            |

#### Further information:

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

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

##### Industry Mall (Online ordering system)

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

##### Cax online generator:

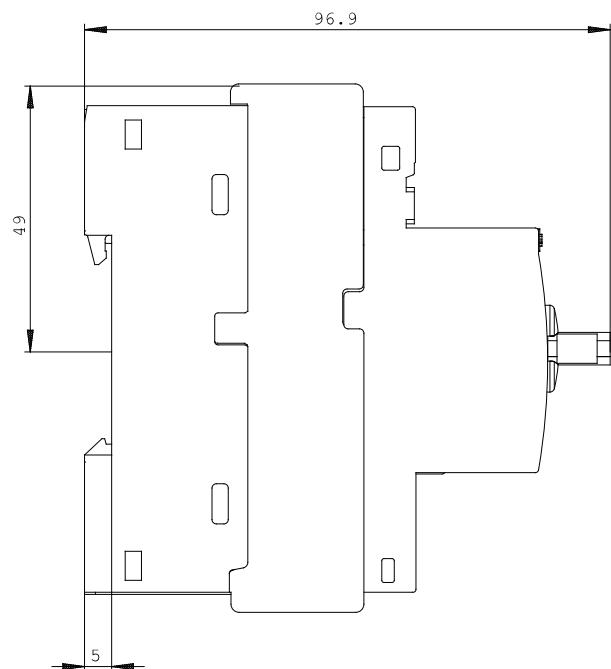
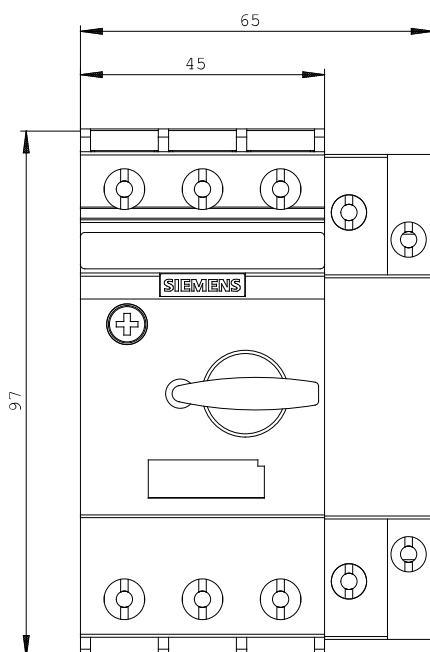
<http://www.siemens.com/cax>

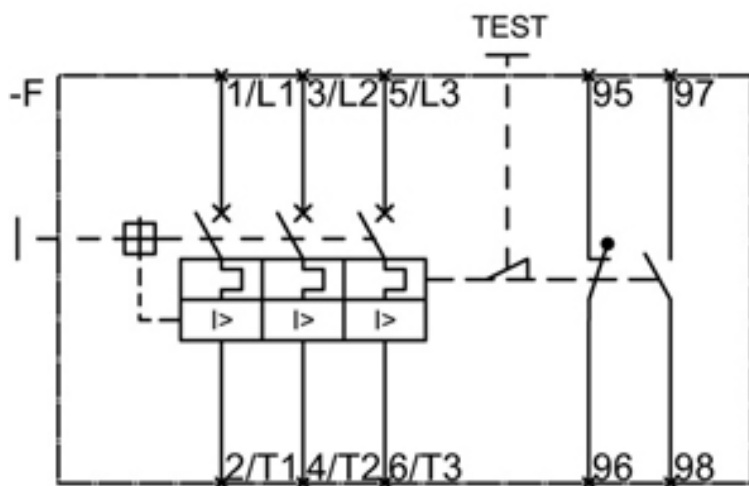
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RV2111-0DA10/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV2111-0DA10](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2111-0DA10)





last change:

Feb 14, 2013