



CIRCUIT-BREAKER SZ S0,  
FOR TRANSFORMER PROT. A-RELEASE 11...16A,  
N-RELEASE 286A, 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                                                  |  | S0                   |
| Number of poles / for main current circuit                                   |  | 3                    |
| Product function                                                             |  |                      |
| • short circuit protection                                                   |  | Yes                  |
| • overload protection                                                        |  | Yes                  |
| • phase disturbance recognition                                              |  | Yes                  |
| • plant protection                                                           |  | No                   |
| • motor protection                                                           |  | No                   |
| • motor protection with relais overload functionality                        |  | No                   |
| • starter protection                                                         |  | No                   |
| • transformer protection                                                     |  | Yes                  |
| • disconnecter functionality                                                 |  | Yes                  |
| • main control switches with supply disconnect function and EM-STOP switches |  | No                   |
| Design of the operating mechanism                                            |  | selector switch      |
| Product component                                                            |  |                      |
| • auxiliary switch                                                           |  | Yes                  |
| • undervoltage release mechanism                                             |  | No                   |

|                                                                      |    |             |
|----------------------------------------------------------------------|----|-------------|
| • trip indicator                                                     |    | No          |
| <b>Product extension</b>                                             |    |             |
| • auxiliary switch                                                   |    | Yes         |
| • optional / motor drive                                             |    | No          |
| <b>Insulation voltage / with degree of pollution 3 / rated value</b> | V  | 690         |
| <b>Impulse 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 a height over sea level / maximum</b>  | m  | 2,000       |
| <b>Relative humidity</b>                                             |    |             |
| • during operating phase                                             | %  | 10 ... 95   |
| <b>Ambient temperature</b>                                           |    |             |
| • during transport                                                   | °C | -50 ... +80 |
| • during storage                                                     | °C | -50 ... +80 |
| • during operating                                                   | °C | -20 ... +60 |
| <b>Shock resistance / according to IEC 60068-2-27</b>                |    | 25g / 11 ms |
| <b>Active power loss / total / typical</b>                           | W  | 8.3         |

#### Main circuit:

|                                                             |    |           |
|-------------------------------------------------------------|----|-----------|
| <b>Operating voltage / rated value</b>                      | V  | 690       |
| <b>Voltage type / for main 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  | 16        |

#### 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>Varification of suitability / ATEX</b>                                                  |    | No        |
| <b>Design of the overload circuit breaker</b>                                              |    | thermal   |
| <b>Adjustable response current / of the current-dependent overload release</b>             | A  | 11 ... 16 |
| <b>Trip class</b>                                                                          |    | CLASS 10  |
| <b>Design of the short-circuit trip</b>                                                    |    | magnetic  |
| <b>Operational short-circuit current breaking capacity (<math>I_{cs}</math>) / with AC</b> |    |           |
| • at 240 V / rated value                                                                   | kA | 100       |
| • at 400 V / rated value                                                                   | kA | 25        |

|                                                                                                  |    |            |
|--------------------------------------------------------------------------------------------------|----|------------|
| • at 500 V / rated value                                                                         | kA | 5          |
| • at 690 V / rated value                                                                         | kA | 2          |
| <b>Breaking capacity maximum short-circuit current (Icu)</b>                                     |    |            |
| • at 240 V / for AC / rated value                                                                | kA | 100        |
| • at 400 V / for AC / rated value                                                                | kA | 55         |
| • at 500 V / for AC / rated value                                                                | kA | 10         |
| • at 690 V / for AC / rated value                                                                | kA | 4          |
| <b>Design of fuse insert / for IT network / for short-circuit protection of the main circuit</b> |    |            |
| • at 400 V                                                                                       |    | gL/gG 63 A |
| • at 500 V                                                                                       |    | gL/gG 50 A |
| • at 690 V                                                                                       |    | gL/gG 40 A |
| <b>Breaking capacity short-circuit current (Icn)</b>                                             |    |            |
| • with 1 current path / at 150 V / for DC / rated value                                          | kA | 10         |
| • with 2 current paths in series / at 300 V / for DC / rated value                               | kA | 10         |
| • with 3 current paths in series / at 450 V / for DC / 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 the connectable conductor cross-section</b>                                 |  |                                                   |
| • for main contacts                                                                    |  |                                                   |
| • solid or multi-stranded                                                              |  | 2x (1 ... 2,5 mm²), 2x (2,5 ... 10 mm²)           |
| • finely stranded                                                                      |  |                                                   |
| • with conductor end processing                                                        |  | 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm² |
| • for AWG conductors / for main contacts                                               |  | 2x (16 ... 12), 2x (14 ... 8)                     |
| <b>Design of the electrical connection / for auxiliary and control current circuit</b> |  | screw-type terminals                              |
| <b>Type of the connectable conductor cross-section</b>                                 |  |                                                   |
| • for auxiliary contacts                                                               |  |                                                   |
| • solid or multi-stranded                                                              |  | 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²)       |
| • finely stranded                                                                      |  |                                                   |
| • with conductor end processing                                                        |  | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)       |

- for AWG conductors / for auxiliary contacts

2x (20 ... 16), 2x (18 ... 14)

#### UL/CSA ratings:

**Operating voltage / according to UL 60947 / rated value**

V

600

**Full-load current (FLA) / for 3-phase motor**

- at 480 V / rated value
- at 600 V / rated value

A

16

A

16

**Contact rating designation / for auxiliary contacts / according to UL**

C300 / R300

#### Certificates/ approvals:

**General Product Approval**

**Declaration of  
Conformity**

**Test Certificates**



CCC



EG-Konf.

[Special Test  
Certificate](#)

[Type Test  
Certificates/Test  
Report](#)

#### Shipping Approval



ABS



BUREAU  
VERITAS



DNV



GL



LRS



PRS

#### Shipping Approval

**other**



RINA



RMRS

[Confirmation](#)



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#### 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**

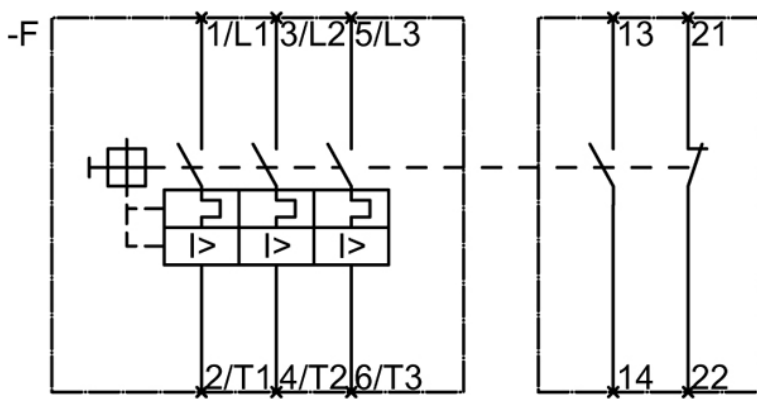
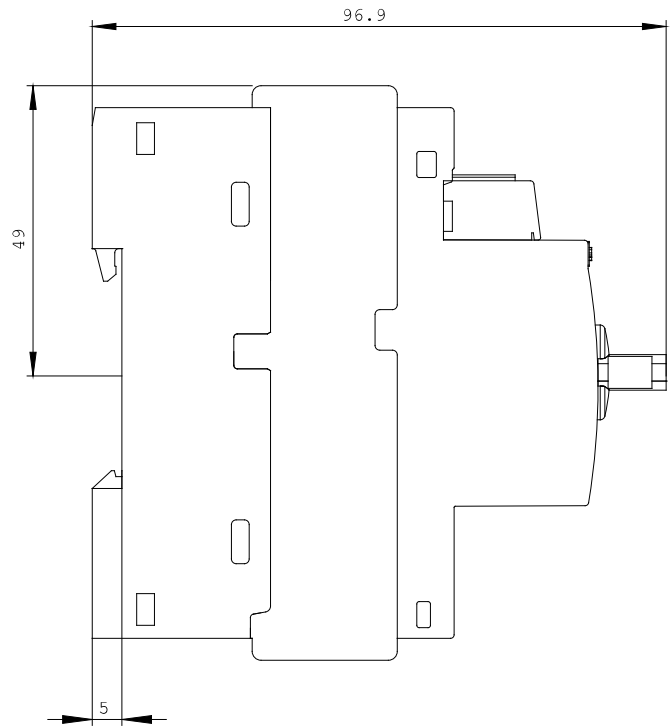
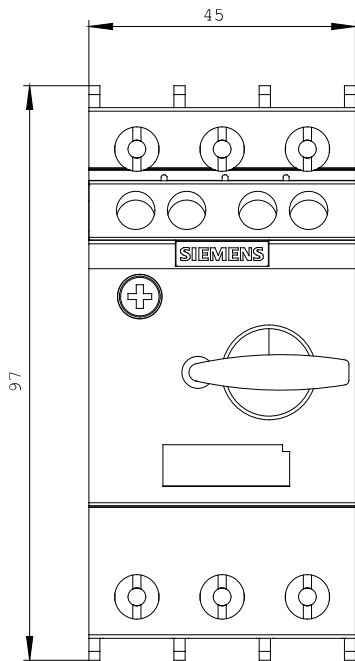
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RV2421-4AA15/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV2421-4AA15](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2421-4AA15)



last change:

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