



CIRCUIT-BREAKER SZ S00,  
FOR PLANT PROTECTION,  
WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA  
C22.2 NO.5-02. A-RELEASE 10 A,  
N-RELEASE 130 A, SCREW CONNECTION,  
STANDARD SW. CAPACITY

### General technical data:

|                                                                            |    |                      |
|----------------------------------------------------------------------------|----|----------------------|
| Product brand name                                                         |    | SIRIUS               |
| product designation                                                        |    | 3RV2 circuit breaker |
| Size of the circuit-breaker                                                |    | S00                  |
| Protection class IP / on the front                                         |    | IP20                 |
| Degree of pollution                                                        |    | 3                    |
| Installation altitude / at a height over sea level / maximum               | m  | 2,000                |
| Ambient temperature                                                        |    |                      |
| • during storage                                                           | °C | -50 ... 80           |
| • during operating                                                         | °C | -20 ... 60           |
| • during transport                                                         | °C | -50 ... 80           |
| Resistance against shock                                                   |    | 25g / 11 ms          |
| Impulse voltage resistance / rated value                                   | kV | 6                    |
| Insulation voltage / rated value                                           | V  | 690                  |
| Active power loss / total / typical                                        | W  | 8.7                  |
| Item designation                                                           |    |                      |
| • according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 |    | F                    |
| • according to DIN EN 61346-2                                              |    | F                    |
| Mechanical operating cycles as operating time                              |    |                      |

|                                                    |  |                 |
|----------------------------------------------------|--|-----------------|
| • of the main contacts / typical                   |  | 100,000         |
| • of the auxiliary contacts / typical              |  | 100,000         |
| <b>Type of the driving mechanism / motor drive</b> |  | No              |
| <b>Design of the operating mechanism</b>           |  | selector switch |
| <b>Product function</b>                            |  |                 |
| • overload protection                              |  | Yes             |
| • phase disturbance recognition                    |  | No              |
| <b>Product component</b>                           |  |                 |
| • auxiliary switch                                 |  | No              |
| • undervoltage release mechanism                   |  | No              |
| • trip indicator                                   |  | No              |
| <b>Product extension / optional / motor drive</b>  |  | No              |

|                                                                                |     |                |
|--------------------------------------------------------------------------------|-----|----------------|
| <b>Main circuit:</b>                                                           |     |                |
| <b>Number of poles / for main current circuit</b>                              |     | 3              |
| <b>Operating voltage / at AC-3 / rated value / maximum</b>                     | V   | 690            |
| <b>Operating current / at AC-3 / at 400 V / rated value</b>                    | A   | 8.5            |
| <b>Service power / at AC-3</b>                                                 |     |                |
| • 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>Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum</b> | 1/h | 15             |
| <b>Arrangement of electrical connectors / for main current circuit</b>         |     | Top and bottom |
| <b>Service power / at AC-3 / at 230 V / rated value</b>                        | W   | 2,200          |
| <b>Continuous current / rated value</b>                                        | A   | 10             |

|                                                                                 |  |     |
|---------------------------------------------------------------------------------|--|-----|
| <b>Auxiliary circuit:</b>                                                       |  |     |
| <b>Product extension / auxiliary switch</b>                                     |  | Yes |
| <b>Number of NC contacts / for auxiliary contacts / instantaneous switching</b> |  | 0   |
| <b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b> |  | 0   |
| <b>Number of change-over switches / for auxiliary contacts</b>                  |  | 0   |

|                                 |  |   |
|---------------------------------|--|---|
| <b>Inputs/ Outputs:</b>         |  |   |
| <b>Number of digital inputs</b> |  | 0 |

|                                                                       |   |         |
|-----------------------------------------------------------------------|---|---------|
| <b>Short-circuit:</b>                                                 |   |         |
| <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 | 42,000  |

|                                                                                                                               |   |                |
|-------------------------------------------------------------------------------------------------------------------------------|---|----------------|
| • at 690 V / rated value                                                                                                      | A | 6,000          |
| <b>Breaking capacity limit short-circuit current (I<sub>cu</sub>) / at 480 AC Y/277 V / according to UL 489 / rated value</b> | A | 65,000         |
| <b>Design of the overcurrent release and short-circuit release</b>                                                            |   | thermomagnetic |

| Installation/mounting/dimensions:                        |    |                                                                                        |
|----------------------------------------------------------|----|----------------------------------------------------------------------------------------|
| <b>Built in orientation</b>                              |    | any                                                                                    |
| <b>Type of mounting</b>                                  |    | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| <b>Width</b>                                             | mm | 45                                                                                     |
| <b>Height</b>                                            | mm | 144                                                                                    |
| <b>Depth</b>                                             | mm | 91                                                                                     |
| <b>Distance, to be maintained, to the ranks assembly</b> |    |                                                                                        |
| • forwards                                               | mm | 0                                                                                      |
| • backwards                                              | mm | 0                                                                                      |
| • upwards                                                | mm | 50                                                                                     |
| • downwards                                              | mm | 50                                                                                     |
| • sideways                                               | mm | 0                                                                                      |
| <b>Distance, to be maintained, to earthed part</b>       |    |                                                                                        |
| • forwards                                               | mm | 0                                                                                      |
| • backwards                                              | mm | 0                                                                                      |
| • upwards                                                | mm | 50                                                                                     |
| • sideways                                               | mm | 30                                                                                     |
| • downwards                                              | mm | 50                                                                                     |
| <b>Distance, to be maintained, conductive elements</b>   |    |                                                                                        |
| • forwards                                               | mm | 0                                                                                      |
| • backwards                                              | mm | 0                                                                                      |
| • upwards                                                | mm | 50                                                                                     |
| • downwards                                              | mm | 50                                                                                     |
| • sideways                                               | mm | 30                                                                                     |

| Connections:                                           |  |                                |
|--------------------------------------------------------|--|--------------------------------|
| <b>Product function</b>                                |  |                                |
| • removable terminal for main circuit                  |  | No                             |
| • removable terminal for auxiliary and control circuit |  | No                             |
| <b>Design of the electrical connection</b>             |  |                                |
| • for main current circuit                             |  | screw-type terminals           |
| <b>Type of the connectable conductor cross-section</b> |  |                                |
| • for main contacts                                    |  |                                |
| • solid                                                |  | 2x (1 ... 10 mm <sup>2</sup> ) |
| • stranded                                             |  | 1.5 ... 25 mm <sup>2</sup>     |

- finely stranded
- with conductor end processing
- for AWG conductors / for main contacts

2x (1 ... 16 mm<sup>2</sup>)

2x (14 ... 10)

## Certificates/approvals:

### Verification of suitability

- für Staubexplosionsschutz für Zone 21/22
- for gas explosion protection for zone 1/2

CE / UL / CSA

no

no

### General Product Approval

### Test Certificates



[ROSTEST](#)



[Manufacturer](#)

### Shipping Approval



ABS



GL



LRS



PRS



RINA



RMRS

### other

[Manufacturer](#)

[other](#)



VDE

## Safety:

### B10 value / with high demand rate

- according to SN 31920

50,000

### T1 value / for proof test interval or service life

- according to IEC 61508

a

10

### Failure rate (FIT value) / with low demand rate

- according to SN 31920

FIT

50

### Proportion of dangerous failures

- with low demand rate / according to SN 31920
- with high demand rate / according to SN 31920

%

40

%

40

### Protection against electrical shock

finger-safe

## Further information:

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

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

### Industry Mall (Online ordering system)

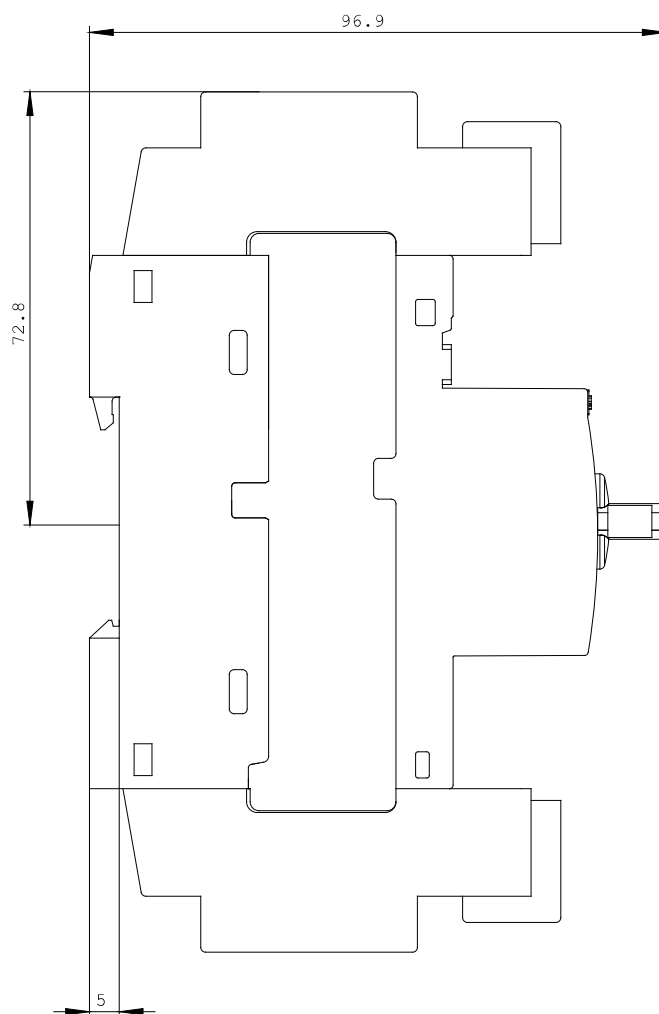
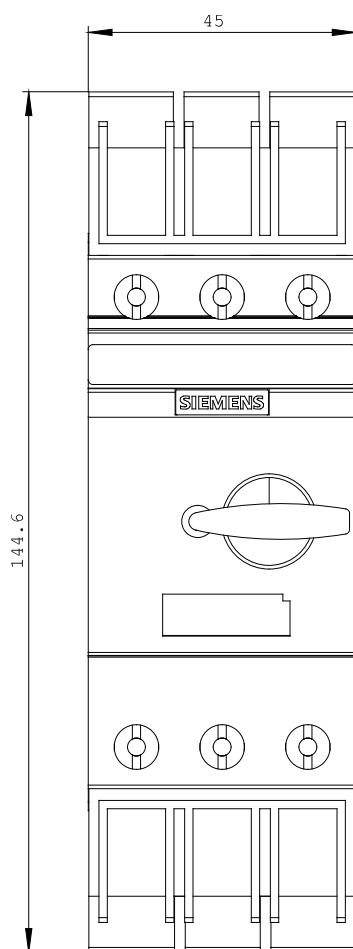
<http://www.siemens.com/industrial-controls/mall>

### CAX-Online-Generator

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

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

<http://support.automation.siemens.com/WW/view/en/3RV2711-1JD10/all>





last change:

Oct 17, 2011