## SIEMENS

## **Product data sheet**



CIRCUIT-BREAKER SZ S00, FOR PLANT PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 5 A, N-RELEASE 65 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  | 7                    |
| Item designation   |    |                      |
| <ul> <li>according to DIN 40719 extendable after IEC 204-2 / according<br/>to IEC 750</li> </ul> |    | F                    |
| according to DIN EN 61346-2  |    | F                    |
| Mechanical operating cycles as operating time  |    |                      |

| of the main contacts / typical   |     | 100,000         |
|--|-----|-----------------|
| <ul> <li>of the auxiliary contacts / typical</li> </ul>                  |     | 100,000         |
| Type of the driving mechanism / motor drive                              | -   | No              |
| Design of the operating mechanism  | -   | selector switch |
| Product function   | _   |                 |
| overload protection  |     | Yes             |
| phase disturbance recognition  |     | No              |
| Product component  | _   |                 |
| auxiliary switch   |     | No              |
| undervoltage release mechanism   |     | No              |
| • trip indicator   |     | No              |
| Product extension / optional / motor drive                               |     | No              |
| Main circuit:  |     |                 |
| Number of poles / for main current circuit                               |     | 3               |
| Operating voltage / at AC-3 / rated value / maximum                      | V   | 690             |
| Operating current / at AC-3 / at 400 V / rated value                     | А   | 4.9             |
| Service power / at AC-3  | _   |                 |
| • at 400 V / rated value   | W   | 2,200           |
| • at 500 V / rated value   | W   | 2,200           |
| • at 690 V / rated value   | W   | 4,000           |
| Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum  | 1/h | 15              |
| Arrangement of electrical connectors / for main current circuit          |     | Top and bottom  |
| Service power / at AC-3 / at 230 V / rated value                         | W   | 1,100           |
| Continuous current / rated value   | А   | 5               |
| Auxiliary circuit:   |     |                 |
| Product extension / auxiliary switch                                     |     | Yes             |
| Number of NC contacts / for auxiliary contacts / instantaneous switching | -   | 0               |
| Number of NO contacts / for auxiliary contacts / instantaneous switching | -   | 0               |
| Number of change-over switches / for auxiliary contacts                  |     | 0               |
| Inputs/ Outputs:   |     |                 |
| Number of digital inputs   |     | 0               |
| Short-circuit:   |     |                 |
| Breaking capacity limit short-circuit current (Icu)                      |     |                 |
| • at 400 V / rated value   | А   | 100,000         |
| • at 500 V / rated value   | А   | 100,000         |
|  |     |                 |

| • at 690 V / rated value   | А   | 6,000                |  |  |
|--|---|----------------------|--|--|
| Breaking capacity limit short-circuit current (Icu) / at 480 AC          | A 65,000  |                      |  |  |
| Y/277 V / according to UL 489 / rated value                              |   |                      |  |  |
| Design of the overcurrent release and short-circuit release              | thermomagnetic  |                      |  |  |
| Installation/mounting/dimensions:  |   |                      |  |  |
| Built in orientation   |   | any                  |  |  |
| Type of mounting   | screw and snap-on mounting onto 35 mm standard<br>mounting rail according to DIN EN 60715 |                      |  |  |
| Width  | mm  |                      |  |  |
| Height   | mm 144  |                      |  |  |
| Depth  | mm  | 91                   |  |  |
| Distance, to be maintained, to the ranks assembly                        | _   |                      |  |  |
| • forwards   |   | 0                    |  |  |
| backwards  | mm 0<br>mm 0  |                      |  |  |
| • upwards  | mm  | 50                   |  |  |
| downwards  | mm  | 50                   |  |  |
| • sidewards  | mm  | 0                    |  |  |
| Distance, to be maintained, to earthed part                              | -   |                      |  |  |
| • forwards   | mm  | 0                    |  |  |
| backwards  | mm  | 0                    |  |  |
| • upwards  | mm  | 50                   |  |  |
| • sidewards  | mm  | 30                   |  |  |
| downwards  | mm  | 50                   |  |  |
| Distance, to be maintained, conductive elements                          | _   |                      |  |  |
| • forwards   | mm  | 0                    |  |  |
| • backwards  | mm  | 0                    |  |  |
| • upwards  | mm  | 50                   |  |  |
| downwards  | mm  | 50                   |  |  |
| • sidewards  | mm  | 30                   |  |  |
| Connections:   |   |                      |  |  |
| Product function   |   |                      |  |  |
| removable terminal for main circuit                                      |   | No                   |  |  |
| <ul> <li>removable terminal for auxiliary and control circuit</li> </ul> |   | No                   |  |  |
| Design of the electrical connection                                      |   |                      |  |  |
| for main current circuit   |   | screw-type terminals |  |  |
| Type of the connectable conductor cross-section                          |   |                      |  |  |
| • for main contacts  |   |                      |  |  |
| • solid  |   | 2x (1 10 mm2)        |  |  |
| • stranded   |   | 1.5 25 mm²           |  |  |

| <ul><li>finely stran</li><li>with con</li></ul> | ded<br>ductor end processing |                            | 2>               | د (1 16 mm2) |      |
|---|------------------------------|----------------------------|------------------|--------------|------|
| • for AWG cond                                  | luctors / for main contact   | S                          | 2>               | x (14 10)    |      |
| Certificates/app                                | provals:                     |                            |                  |              |      |
| Verification of su                              | itability                    |                            | C                | E / UL / CSA |      |
| • für Staubexplo                                | osionsschutz für Zone 21     | /22                        | nc               | )            |      |
| <ul> <li>for gas explos</li> </ul>              | ion protection for zone 1    | /2                         | nc               | )            |      |
| General Produc                                  | t Approval                   |                            | Test Certificate | s            |      |
| (SA)  | ROSTEST                      |                            | Manufacturer     |              |      |
| Shipping Appro                                  | val                          |                            |                  |              |      |
| ABS   | GL<br>GL                     | Lloyd's<br>Register<br>Lrs | PRS              | RINA         | RMRS |
| other   |                              |                            |                  |              |      |
| Manufacturer                                    | other                        |                            |                  |              |      |

| 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                             | а   | 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       | %   | 40          |  |
| • with high demand rate / according to SN 31920    | %   | 40          |  |
| Protection against electrical shock                |     | finger-safe |  |

VDE

## Further information:

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

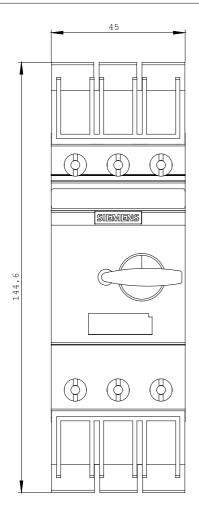
Industry Mall (Online ordering system) http://www.siemens.com/industrial-controls/mall

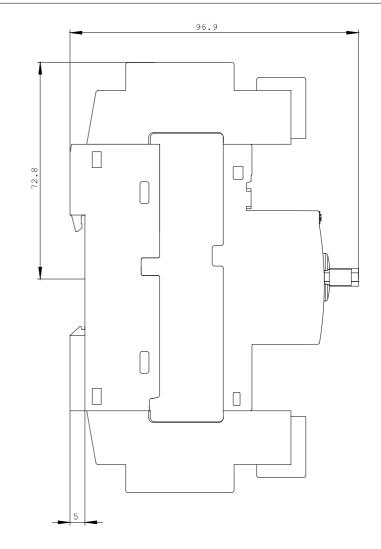
CAx-Online-Generator

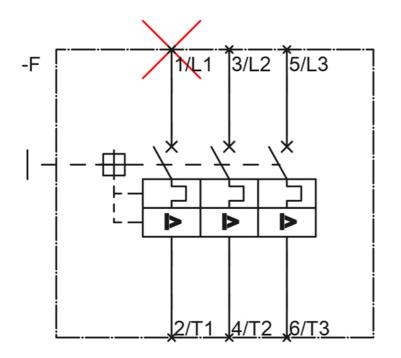
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV2711-1FD10/all









last change:

Oct 17, 2011