SIEMENS

Product data sheet 3RV2711-1DD10



CIRCUIT-BREAKER SZ S00, FOR PLANT PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 3.2 A, N-RELEASE 42 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 | 6.9 |
| 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 | | |

| Type of the diriving mechanism / motor drive Design of the diriving mechanism / motor drive Product function • overload protection • phase disturbance recognition Product component • auxiliary switch • undervoitage release mechanism • trip indicator Product extension / optional / motor drive No Main circuit: Number of poles / for main current circuit • at 400 V / rated value • at 600 V / rated value Prequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Continuous current / rated value Product extension / auxiliary switch • 1500 V rated value • 1500 V rated value Product extension / auxiliary switch • 1500 V rated value Product extension / auxiliary contacts / instantaneous switching No Continuous current / rated value / maximum Operating current / at AC-3 / according to IEC 60947-6-2 / lifth 15 Arrangement of electrical connectors / for main current circuit Arrangement of electrical connectors / for main current circuit Arrangement of electrical connectors / for main current circuit Arrangement of operation / at AC-3 / according to IEC 60947-6-2 / lifth 15 Continuous current / rated value A 32 Auxiliary circuit: Product extension / auxiliary contacts / instantaneous switching Number of NC contacts / for auxiliary contacts / instantaneous switching Number of Operation / auxiliary contacts / instantaneous switching Number of operation / auxiliary contacts / instantaneous switching Number of oligital inputs Document of legital inputs Product extension / auxiliary contacts / instantaneous switching Number of Ordinated value A 100,000 | of the main contacts / typical | | 100,000 |
|--|---|-----|-----------------|
| Design of the operating mechanism Product function • overload protection • phase disturbance recognition Product component • auxiliary switch • undervoltage release mechanism • tip indicator Product extension / optional / motor drive Main circuit: Number of poles / for main current circuit Service power / at AC-3 / at 400 V / rated value • at 400 V / rated value • at 690 V / rated value • by 550 Continuous current / rated value Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs Description: Breaking capacity limit short-circuit current (icu) • at 400 V / rated value A 100,000 | of the auxiliary contacts / typical | | 100,000 |
| Product function • overload protection • phase disturbance recognition Product component • auxiliary switch • undervoltage release mechanism • trip indicator Product extension / optional / motor drive No Main circuit: Number of poles / for main current circuit Operating vortrage / at AC-3 / rated value / maximum Operating current / at AC-3 / at 400 V / rated value • at 400 V / rated value • at 690 V / rated value • by 2,200 Prequency of operation / at AC-3 / according to IEC 69947-6-2 / maximum Service power / at AC-3 / at 230 V / rated value W 550 Continuous current / rated value A 3,2 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts / instantaneous switching Number of digital inputs D Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000 | Type of the driving mechanism / motor drive | | No |
| - overload protection - phase disturbance recognition Product component - auxiliary switch - undervoltage release mechanism - itip indicator Product extension / optional / motor drive No Product extension / optional / motor drive Number of poles / for main current circuit Operating voltage / at AC-3 / rated value / maximum Operating current / at AC-3 / at 400 V / rated value - at 400 V / rated value - at 500 V / rated value - at 690 V / rated value - at 690 V / rated value - at 690 V / rated value - at 69 | Design of the operating mechanism | | selector switch |
| Product component auxiliary switch Industry switch Auxiliary switch Industry switch In | Product function | | |
| Product component - auxiliary switch - undervoltage release mechanism - trip indicator Product extension / optional / motor drive No Main circuit: Number of poles / for main current circuit Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value - at 400 V / rated value - at 500 V / rated value - at 500 V / rated value - at 690 V / rated | overload protection | | Yes |
| - auxiliary switch - undervoltage release mechanism - trip indicator Product extension / optional / motor drive Main circuit: Number of poles / for main current circuit Operating voltage / at AC-3 / rated value / maximum Operating current / at AC-3 / rated value / maximum Operating current / at AC-3 / at 400 V / rated value at 400 V / rated value at 400 V / rated value vw 1,500 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value W 550 Continuous current / rated value W 550 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts / instantaneous switching Number of digital inputs 0 Short-circuit: Breaking capacity limit short-circuit current (lcu) - at 400 V / rated value A 100,000 | phase disturbance recognition | | No |
| Indevoltage release mechanism Introduct extension / optional / motor drive Main circuit: Number of poles / for main current circuit Operating voltage / at AC-3 / rated value / maximum Operating current / at AC-3 / rated value / maximum Operating current / at AC-3 / rated value / maximum Operating current / at AC-3 / at 400 V / rated value A 2.7 Service power / at AC-3 - at 400 V / rated value - at 500 V / rated value - at 500 V / rated value - at 690 V / rated value - at 690 V / rated value - at 690 V / rated value - at 2,200 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value W 550 Continuous current / rated value A 3.2 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of Change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit current (Icu) - at 400 V / rated value A 100,000 | Product component | | |
| + trip indicator Product extension / optional / motor drive Main circuit: Number of poles / for main current circuit Operating voltage / at AC-3 / rated value / maximum Operating current / at AC-3 / at 400 V / rated value at 400 V / rated value at 400 V / rated value at 600 V / rated value be at 600 V / rated value Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value W 2,200 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value W 550 Continuous current / rated value A 3,2 Auxillary circuit: Product extension / auxillary switch Number of NC contacts / for auxillary contacts / instantaneous switching Number of Change-over switches / for auxillary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit Breaking capacity limit short-circuit current (Icu) - at 400 V / rated value A 100,000 | auxiliary switch | | No |
| Product extension / optional / motor drive Main circuit: Number of poles / for main current circuit Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value A 2.7 Service power / at AC-3 - at 400 V / rated value - at 500 V / rated value - at 690 V / rated value - | undervoltage release mechanism | | No |
| Number of poles / for main current circuit Operating voltage / at AC-3 / at 400 V / rated value Operating current / at AC-3 / at 400 V / rated value Operating current / at AC-3 / at 400 V / rated value **at 400 V / rated value **at 500 V / rated value **at 690 V / rated value **Top and bottom Service power / at AC-3 / at 230 V / rated value W 550 Continuous current / rated value A 3.2 **Auxiliary circuit: **Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of digital inputs **Operation / auxiliary contacts / instantaneous of the form of the f | • trip indicator | | No |
| Number of poles / for main current circuit Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value A 2.7 Service power / at AC-3 • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value W 550 Continuous current / rated value A 3.2 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of donontacts / for auxiliary contacts / instantaneous switching Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 2.7 4 2.7 5 90 1,100 4 1,100 5 15 1,000 Top and bottom Top and | Product extension / optional / motor drive | | No |
| Operating voltage / at AC-3 / rated value / maximum Operating current / at AC-3 / at 400 V / rated value Service power / at AC-3 • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value W 1,100 • 2,200 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value Continuous current / rated value W 550 A 3,2 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000 | Main circuit: | | |
| Operating current / at AC-3 / at 400 V / rated value A 2.7 Service power / at AC-3 • at 400 V / rated value • at 500 V / rated value • at 600 V / rated value • at 600 V / rated value • at 600 V / rated value Trequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value W 550 Continuous current / rated value W 550 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of dange-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O 5hort-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 2.7 Auxiliary I,100 I,100 I,500 I,100 I,10 | Number of poles / for main current circuit | | 3 |
| Service power / at AC-3 • at 400 V / rated value • at 500 V / rated value • at 600 V / rated value • at 600 V / rated value Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value W 550 Continuous current / rated value Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of dange-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value V 1,500 V 2,200 Top and bottom Yes O O O Short-circuit: A 100,000 | Operating voltage / at AC-3 / rated value / maximum | V | 690 |
| • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at 690 V / rated value Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value W 550 Continuous current / rated value A 3.2 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (lcu) • at 400 V / rated value A 1,000 | Operating current / at AC-3 / at 400 V / rated value | Α | 2.7 |
| • at 500 V / rated value • at 690 V / rated value Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value Continuous current / rated value Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value W 2,200 To p and bottom To p and bottom V 550 A 3.2 O O Short-circuit: A 100,000 | Service power / at AC-3 | | |
| • at 690 V / rated value Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value Continuous current / rated value Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 2,200 1/h 15 15 15 15 15 16 17 17 15 17 15 15 15 15 15 15 | • at 400 V / rated value | W | 1,100 |
| Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value Continuous current / rated value Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value 1/h 15 1/h 15 Top and bottom Top and bottom Top and bottom 0 0 50 0 4 3.2 | at 500 V / rated value | W | 1,500 |
| maximum Arrangement of electrical connectors / for main current circuit Service power / at AC-3 / at 230 V / rated value W 550 Continuous current / rated value Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000 | • at 690 V / rated value | W | 2,200 |
| Service power / at AC-3 / at 230 V / rated value Continuous current / rated value A 3.2 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 3.2 | | 1/h | 15 |
| Continuous current / rated value A 3.2 Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000 | Arrangement of electrical connectors / for main current circuit | | Top and bottom |
| Auxiliary circuit: Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000 | Service power / at AC-3 / at 230 V / rated value | W | 550 |
| Product extension / auxiliary switch Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000 | Continuous current / rated value | Α | 3.2 |
| Number of NC contacts / for auxiliary contacts / instantaneous switching Number of NO contacts / for auxiliary contacts / instantaneous switching 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 A 100,000 | Auxiliary circuit: | | |
| Number of NO contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000 | Product extension / auxiliary switch | | Yes |
| Number of change-over switches / for auxiliary contacts Inputs/ Outputs: Number of digital inputs O Short-circuit: Breaking capacity limit short-circuit current (lcu) • at 400 V / rated value A 100,000 | | | 0 |
| Inputs/ Outputs: Number of digital inputs 0 Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000 | | | 0 |
| Number of digital inputs Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000 | Number of change-over switches / for auxiliary contacts | | 0 |
| Short-circuit: Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000 | Inputs/ Outputs: | | |
| Breaking capacity limit short-circuit current (Icu) • at 400 V / rated value A 100,000 | Number of digital inputs | | 0 |
| • at 400 V / rated value A 100,000 | Short-circuit: | | |
| | Breaking capacity limit short-circuit current (Icu) | | |
| • at 500 V / rated value A 100,000 | • at 400 V / rated value | Α | 100,000 |
| | • at 500 V / rated value | Α | 100,000 |

| • at 690 V / rated value | Α | 10,000 |
|---|---|----------------|
| Breaking capacity limit short-circuit current (lcu) / at 480 AC Y/277 V / according to UL 489 / rated value | А | 65,000 |
| 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 mounting rail according to DIN EN 60715 |
| Width | mm | 45 |
| Height | mm | 144 |
| Depth | mm | 91 |
| Distance, to be maintained, to the ranks assembly | | |
| • forwards | mm | 0 |
| • backwards | 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 |
| • removable terminal for auxiliary and control circuit | 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 |

• finely stranded

· with conductor end processing

• for AWG conductors / for main contacts

2x (1 ... 16 mm²)
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



ROSTEST



Test Certificates

Manufacturer

Shipping Approval













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 |

Further information:

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

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

Industry Mall (Online ordering system)

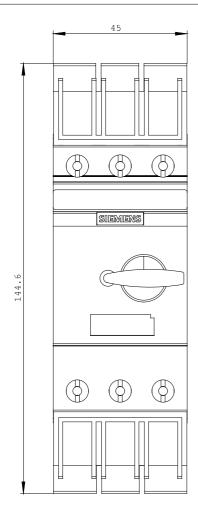
http://www.siemens.com/industrial-controls/mall

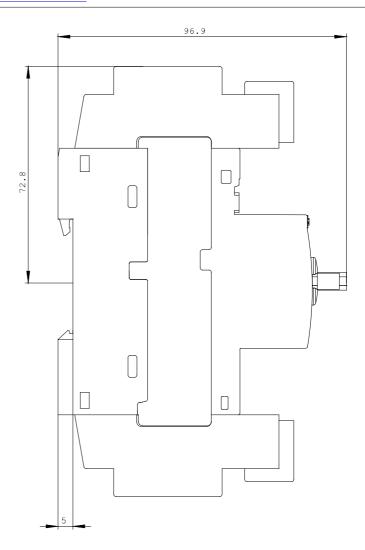
CAx-Online-Generator

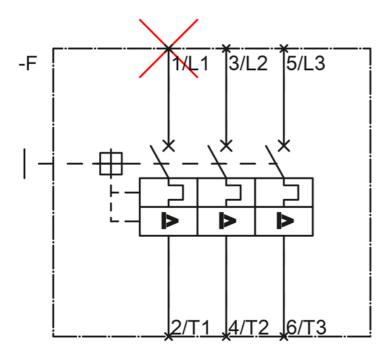
http://www.siemens.com/cax

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

 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RV2711-1DD10/all}}$







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