## **SIEMENS**

Product data sheet 3RV2021-4DA20



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 18...25A, N-RELEASE 325A, SPRING-L. CONNECTION, STANDARD SW. CAPACITY,

| General technical data:  |  |                      |
|--|--|----------------------|
| product brand name   |  | SIRIUS               |
| Product designation  |  | 3RV2 circuit breaker |
| Size of the circuit-breaker  |  | S0                   |
| Size of contactor / can be combined / company-specific                                     |  | S00                  |
| Number of poles / for main current circuit   |  | 3                    |
| Product function   |  |                      |
| Short circuit protection   |  | Yes                  |
| overload protection  |  | Yes                  |
| Phase failure detection  |  | Yes                  |
| System protection  |  | Yes                  |
| motor protection   |  | Yes                  |
| <ul> <li>motor protection with overload relay function</li> </ul>                          |  | No                   |
| • starter protection   |  | No                   |
| Transformer protection   |  | No                   |
| Disconnector functionality   |  | Yes                  |
| <ul> <li>Main switches with supply disconnect function and EM-STOP<br/>switches</li> </ul> |  | No                   |
| Design of the operating mechanism  |  | selector switch      |
| Product component  |  |                      |
| Auxiliary switch   |  | No                   |

| undervoltage release  |    | No          |
|---|----|-------------|
| Trip indicator  |    | No          |
| Product expansion   |    |             |
| Auxiliary switch  |    | Yes         |
| optional / motor drive  |    | No          |
| Insulation voltage / with degree of pollution 3 / Rated value | V  | 690         |
| Surge voltage resistance / Rated value                        | kV | 6           |
| Protection class IP   |    |             |
| of the terminal   |    | IP20        |
| • on the front  |    | IP20        |
| Protection against electrical shock                           |    | finger-safe |
| Installation altitude / at height above sea level / maximum   | m  | 2,000       |
| Relative humidity   |    |             |
| during operation  | %  | 10 95       |
| Ambient temperature   |    |             |
| during transport  | °C | -50 +80     |
| during storage  | °C | -50 +80     |
| during operation  | °C | -20 +60     |
| Shock resistance / acc. to IEC 60068-2-27                     |    | 25g / 11 ms |
| Usage category  |    |             |
| • acc. to IEC 60947-4-1                                       |    | AC-3        |
| Active power loss / total / typical                           | W  | 8           |
|   |    |             |

| Main circuit:  |    |       |
|--|----|-------|
| Operating current / Rated value                      | Α  | 25    |
| Operating voltage / Rated value                      | V  | 690   |
| Type of voltage / for main current circuit           |    | AC/DC |
| Operating frequency                                  |    |       |
| Rated value  | Hz | 50 60 |
| Operating current / at AC-3 / at 400 V / Rated value | Α  | 25    |

| Protective and monitoring functions:  |   |                  |
|---|---|------------------|
| Type of protection  |   | Increased safety |
| Certificate of suitability / ATEX   |   | Yes              |
| Design of the overload circuit breaker  |   | thermal          |
| Adjustable response value current / of the current-dependent overload release | Α | 18 25            |
| Trip class  |   | CLASS 10         |
| Design of the short-circuit trip  |   | magnetic         |

| Response value current / of the instantaneous short-circuit release                         | А  | 325        |
|---|----|------------|
| Operational short-circuit current breaking capacity (lcs) / with AC                         |    |            |
| • 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          |
| Maximum short-circuit current breaking capacity (Icu)                                       |    |            |
| • with AC / at 240 V / Rated value  | kA | 100        |
| • with AC / at 400 V / Rated value  | kA | 55         |
| • with AC / at 500 V / Rated value  | kA | 10         |
| • with AC / at 690 V / Rated value  | kA | 4          |
| Design of the fuse link / for IT network / for short-circuit protection of the main circuit |    |            |
| • at 400 V  |    | gL/gG 63 A |
| • at 500 V  |    | gL/gG 50 A |
| • at 690 V  |    | gL/gG 50 A |
| Breaking capacity short-circuit current (lcn)   |    |            |
| • with 1 current path / for DC / at 150 V / Rated value                                     | kA | 10         |
| • with 2 current paths in series / for DC / at 300 V / Rated value                          | kA | 10         |
| • with 3 current paths in series / for DC / at 450 V / Rated value                          | kA | 10         |

| Installation/ mounting/ dimensions: |    |  |
|-------------------------------------|----|--|
| Mounting type                       |    | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| mounting position                   |    | any  |
| Depth                               | mm | 96   |
| Height                              | mm | 119  |
| Width                               | mm | 45   |

| Connections/ terminals:   |                         |
|---|-------------------------|
| Arrangement of electrical connectors / for main current circuit | Top and bottom          |
| Design of the electrical connection / for main current circuit  | spring-loaded terminals |
| Type of connectable conductor cross-section                     |                         |
| • for main contacts   |                         |
| single or multi-stranded  | 2x (1 10 mm²)           |
| • finely stranded   |                         |
| <ul> <li>without core end processing</li> </ul>                 | 2x (1 6 mm²)            |
| with core end processing  | 2x (1 6 mm²)            |
| • for AWG conductors / for main contacts                        | 2x (18 8)               |

| UL/CSA ratings:                                    |   |     |
|--|---|-----|
| Operating voltage / acc. to UL 60947 / Rated value | V | 600 |
| Full-load current (FLA) / for three-phase AC motor |   |     |
| • at 480 V / Rated value                           | Α | 25  |
| • at 600 V / Rated value                           | Α | 25  |

## Certificates/ approvals:

**General Product Approval** 

Declaration of Conformity

**Test Certificates** 









Special Test Certificate Type Test
Certificates/Test
Report

## **Shipping Approval**













**Shipping Approval** 







Confirmation



other

Environmental Confirmations

## **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

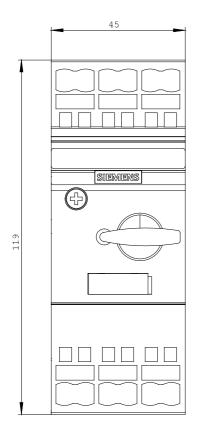
http://www.siemens.com/cax

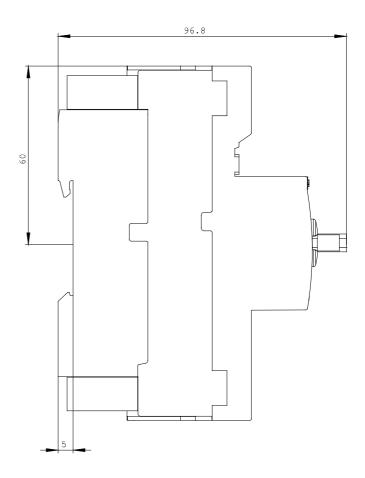
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

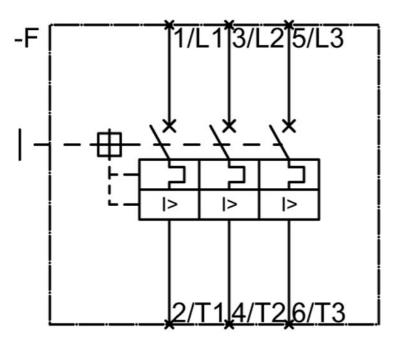
http://support.automation.siemens.com/WW/view/en/3RV2021-4DA20/all

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RV2021-4DA20}$ 







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