SIEMENS

Product data sheet 3RV2021-4NA15



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 23...28A, N-RELEASE 364A, 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 | |
| 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 | |
| motor protection with overload relay function | | No | |
| starter protection | | No | |
| Transformer protection | | No | |
| Disconnector functionality | | Yes | |
| Main switches with supply disconnect function and EM-STOP switches | | No | |
| Design of the operating mechanism | | selector switch | |
| Product component | | | |
| Auxiliary switch | | Yes | |

| 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 | x 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 | 11 | | | | |
| Main circuit: | | | | | | |
| Operating current / Rated value | А | 28 | | | | |
| 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 | А | 28 | | | | |
| Hilfsstromkreis | | | | | | |
| Design of the fuse link / for short-circuit protection of the auxiliary switch / required | | Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A) | | | | |
| 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 | А | 23 28 | | | | |
| | | | | | | |

| Trip class | | CLASS 10 |
|---|----|------------|
| Design of the short-circuit trip | | magnetic |
| Response value current / of the instantaneous short-circuit release | А | 364 |
| 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 63 A |
| • at 690 V | | gL/gG 63 A |
| Breaking capacity short-circuit current (Icn) | | |
| • 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: | | | |
|-------------------------------------|----|--|--|
| • 7. | | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 | |
| mounting position | | any | |
| Depth | mm | 96 | |
| Height | mm | 97 | |
| 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 | screw-type terminals | | |
| Type of connectable conductor cross-section | | | |
| for main contacts | | | |
| single or multi-stranded | 2x (1 2,5 mm²), 2x (2,5 10 mm²) | | |
| finely stranded | | | |
| with core 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) | | |

| Design of the electrical connection / for auxiliary and control current circuit | screw-type terminals | | |
|---|-------------------------------------|--|--|
| Type of connectable conductor cross-section | | | |
| for auxiliary contacts | | | |
| • single or multi-stranded | 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²) | | |
| • finely stranded | | | |
| • with core 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 / acc. to UL 60947 / Rated value | V | 600 | |
| Full-load current (FLA) / for three-phase AC motor | | | |
| • at 480 V / Rated value | Α | 28 | |
| • at 600 V / Rated value | Α | 28 | |
| Contact rating / of the auxiliary contacts / acc. to UL | | C300 / R300 | |

Certificates/ approvals:

| Certificates/ ap | ppiovais. | | | | |
|--------------------------|-----------|---|----------|--------------------------|------------------------------------|
| General Product Approval | | Declaration of Test Certificates Conformity | | | |
| | EAC | (II) | EG-Konf. | Special Test Certificate | Type Test Certificates/Test Report |

Shipping Approval



ccc





UL



EG-Konf.





Shipping Approval











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

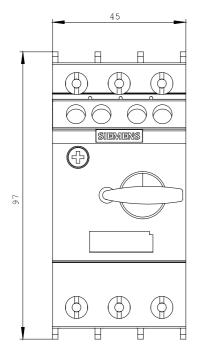
http://www.siemens.com/cax

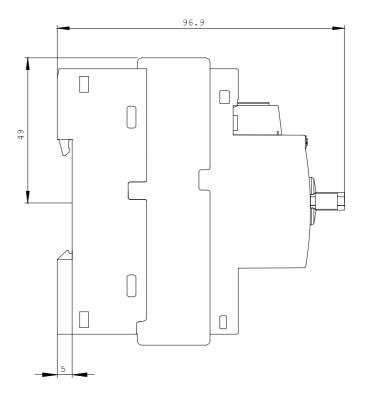
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RV2021-4NA15/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4NA15





last change: Nov 20, 2014