

Reference: 3RV2011-1GA10

CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 4.5...6.3A, N-RELEASE 82A SCREW CONNECTION, STANDARD SW. CAPACITY

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| product brand name | SIRIUS |
| Product designation | 3RV2 circuit breaker |
| General technical data: | |
| Size of the circuit-breaker | S00 |
| Size of contactor can be combined company-specific | S00, S0 |
| Product extension | |
| Auxiliary switch | Yes |
| Power loss [W] total typical | 6 W |
| Insulation voltage with degree of pollution 3 rated value | 690 V |
| Surge voltage resistance rated value | 6 kV |
| maximum permissible voltage for safe isolation | |
| in networks with grounded star point between main and auxiliary circuit | 400 V |
| in networks with grounded star point between main and auxiliary circuit | 400 V |
| Protection class IP | |
| on the front | IP20 |
| of the terminal | IP20 |
| Shock resistance | |
| acc. to IEC 60068-2-27 | 25g / 11 ms |
| Mechanical service life (switching cycles) | |

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| of the main contacts typical | 100 000 |
| of auxiliary contacts typical | 100 000 |
| Electrical endurance (switching cycles) | |
| typical | 100 000 |
| Type of protection | Increased safety |
| Certificate of suitability relating to ATEX | on request |
| Protection against electrical shock | finger-safe |
| Equipment marking acc. to DIN EN 81346-2 | Q |
| Ambient conditions: | |
| Installation altitude at height above sea level maximum | 2 000 m |
| Ambient temperature | |
| during operation | -20 ... +60 °C |
| during storage | -50 ... +80 °C |
| during transport | -50 ... +80 °C |
| Temperature compensation | -20 ... +60 °C |
| Relative humidity during operation | 10 ... 95 % |
| Main circuit: | |
| Number of poles for main current circuit | 3 |
| Adjustable pick-up value current of the current-dependent overload release | 4.5 ... 6.3 A |
| Operating voltage | |
| rated value | 690 V |
| at AC-3 rated value maximum | 690 V |
| Operating frequency rated value | 50 ... 60 Hz |
| Operating current rated value | 6.3 A |
| Operating current | |
| at AC-3 | |
| — at 400 V rated value | 6.3 A |
| Operating power | |
| at AC-3 | |
| — at 230 V rated value | 1 500 W |
| — at 400 V rated value | 2 200 W |
| — at 500 V rated value | 3 000 W |
| — at 690 V rated value | 4 000 W |
| Operating frequency | |
| at AC-3 maximum | 15 1/h |
| Auxiliary circuit: | |
| Number of NC contacts | |

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| for auxiliary contacts | 0 |
| Number of NO contacts | |
| for auxiliary contacts | 0 |
| Number of CO contacts | |
| for auxiliary contacts | 0 |
| Protective and monitoring functions: | |
| Trip class | CLASS 10 |
| Design of the overload release | thermal |
| Operational short-circuit current breaking capacity (Ics) at AC | |
| at 240 V rated value | 100 kA |
| at 400 V rated value | 100 kA |
| at 500 V rated value | 100 kA |
| at 690 V rated value | 4 kA |
| Maximum short-circuit current breaking capacity (Icu) | |
| at AC at 240 V rated value | 100 kA |
| at AC at 400 V rated value | 100 kA |
| at AC at 500 V rated value | 100 kA |
| at AC at 690 V rated value | 6 kA |
| Breaking capacity short-circuit current (Icn) | |
| at 1 current path at DC at 150 V rated value | 10 kA |
| with 2 current paths in series at DC at 300 V rated value | 10 kA |
| with 3 current paths in series at DC at 450 V rated value | 10 kA |
| UL/CSA ratings: | |
| Full-load current (FLA) for three-phase AC motor | |
| at 480 V rated value | 6.3 A |
| at 600 V rated value | 6.3 A |
| Yielded mechanical performance [hp] | |
| for single-phase AC motor | |
| — at 110/120 V rated value | 0.25 hp |
| — at 230 V rated value | 0.5 hp |
| for three-phase AC motor | |
| — at 200/208 V rated value | 1 hp |
| — at 220/230 V rated value | 1.5 hp |
| — at 460/480 V rated value | 3 hp |
| — at 575/600 V rated value | 5 hp |
| Short-circuit protection | |
| Design of the short-circuit trip | magnetic |

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| Design of the fuse link for IT network for short-circuit protection of the main circuit | |
| at 400 V | gL/gG 50 A |
| at 500 V | gL/gG 40 A |
| at 690 V | gL/gG 35 A |
| Installation/ mounting/ dimensions: | |
| Mounting position | any |
| Mounting type | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| Height | 97 mm |
| Witd> | 45 mm |
| Depth | 96 mm |
| Required spacing | |
| with side-by-side mounting | |
| — forwards | 0 mm |
| — Backwards | 0 mm |
| — upwards | 50 mm |
| — downwards | 50 mm |
| — at the side | 0 mm |
| for grounded parts | |
| — forwards | 0 mm |
| — Backwards | 0 mm |
| — upwards | 50 mm |
| — at the side | 30 mm |
| — downwards | 50 mm |
| for live parts | |
| — forwards | 0 mm |
| — Backwards | 0 mm |
| — upwards | 50 mm |
| — downwards | 50 mm |
| — at the side | 30 mm |
| Connections/Terminals: | |
| Product function | |
| removable terminal for auxiliary and control circuit | No |
| Type of electrical connection | |
| for main current circuit | screw-type terminals |
| Arrangement of electrical connectors for main current circuit | Top and bottom |
| Type of connectable conductor cross-sections | |

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| for main contacts | |
| — single or multi-stranded | 2x (0,75 ... 2,5 mm ²), 2x 4 mm ² |
| — finely stranded with core end processing | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) |
| at AWG conductors for main contacts | 2x (18 ... 14), 2x 12 |
| Tightening torque | |
| for main contacts with screw-type terminals | 0.8 ... 1.2 N·m |
| Design of screwdriver shaft | Diameter 5 to 6 mm |
| Design of the thread of the connection screw | |
| for main contacts | M3 |
| Safety related data: | |
| B10 value | |
| with high demand rate acc. to SN 31920 | 5 000 |
| Proportion of dangerous failures | |
| with low demand rate acc. to SN 31920 | 50 % |
| with high demand rate acc. to SN 31920 | 50 % |
| Failure rate [FIT] | |
| with low demand rate acc. to SN 31920 | 50 FIT |
| T1 value for proof test interval or service life acc. to IEC 61508 | 10 y |
| Display version | |
| for switching status | Handle |