



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 2.8...4A, N-RELEASE 52A, SCREW CONNECTION, STANDARD SW. CAPACITY, W. TRANSVERSE AUX. SWITCH 1NO+1NC

| | | |
|---------------------|--|----------------------|
| product brand name | | SIRIUS |
| Product designation | | 3RV2 circuit breaker |

| General technical data: | | |
|--|----|------------------|
| Active power loss total typical | W | 6 |
| Insulation voltage | | |
| • with degree of pollution 3 Rated value | V | 690 |
| Shock resistance | | |
| • acc. to IEC 60068-2-27 | | 25g / 11 ms |
| Surge voltage resistance Rated value | kV | 6 |
| Mechanical service life (switching cycles) | | |
| • of the main contacts typical | | 100 000 |
| • of the auxiliary contacts typical | | 100 000 |
| Electrical endurance (switching cycles) | | |
| • typical | | 100 000 |
| Temperature compensation | °C | -20 ... +60 |
| Size of contactor can be combined company-specific | | S0 |
| Protection class IP | | |
| • on the front | | IP20 |
| • of the terminal | | IP20 |
| Type of protection | | Increased safety |
| Equipment marking | | |
| • acc. to DIN EN 81346-2 | | Q |

| Main circuit: | | |
|--|--|---|
| Number of poles for main current circuit | | 3 |

| | | |
|--|-----|-----------|
| Adjustable response value current of the current-dependent overload release | A | 2.8 ... 4 |
| Operating voltage | | |
| • Rated value | V | 690 |
| • at AC-3 Rated value maximum | V | 690 |
| Operating frequency Rated value | Hz | 50 ... 60 |
| Operating current Rated value | A | 4 |
| Operating current | | |
| • at AC-3 | | |
| — at 400 V Rated value | A | 4 |
| Operating power | | |
| • at AC-3 | | |
| — at 230 V Rated value | W | 750 |
| — at 400 V Rated value | W | 1 500 |
| — at 500 V Rated value | W | 2 200 |
| — at 690 V Rated value | W | 3 000 |
| Operating frequency | | |
| • at AC-3 maximum | 1/h | 15 |

Auxiliary circuit:

| | | |
|---|---|------------|
| Number of NC contacts | | |
| • for auxiliary contacts | | 1 |
| Number of NO contacts | | |
| • for auxiliary contacts | | 1 |
| Number of CO contacts | | |
| • for auxiliary contacts | | 0 |
| Product expansion Auxiliary switch | | Yes |
| Design of the auxiliary switch | | transverse |
| Operating current of the auxiliary contacts at AC-15 | | |
| • at 24 V | A | 2 |
| • at 120 V | A | 0.5 |
| • at 125 V | A | 0.5 |
| • at 230 V | A | 0.5 |
| Operating current of the auxiliary contacts at DC-13 | | |
| • at 24 V | A | 1 |
| • at 60 V | A | 0.15 |

Protective and monitoring functions:

| | | |
|--|----|----------|
| Trip class | | CLASS 10 |
| Design of the overload circuit breaker | | thermal |
| Operational short-circuit current breaking capacity (Ics) with AC | | |
| • at 240 V Rated value | kA | 100 |
| • at 400 V Rated value | kA | 100 |

| | | |
|---|----|-----|
| <ul style="list-style-type: none"> • at 500 V Rated value • at 690 V Rated value | kA | 100 |
| | kA | 4 |
| Maximum short-circuit current breaking capacity (Icu) | | |
| <ul style="list-style-type: none"> • with AC at 240 V Rated value • with AC at 400 V Rated value • with AC at 500 V Rated value • with AC at 690 V Rated value | kA | 100 |
| | kA | 100 |
| | kA | 100 |
| | kA | 6 |
| Breaking capacity short-circuit current (Icn) | | |
| <ul style="list-style-type: none"> • with 1 current path for DC at 150 V Rated value • with 2 current paths in series for DC at 300 V Rated value • with 3 current paths in series for DC at 450 V Rated value | kA | 10 |
| | kA | 10 |
| | kA | 10 |
| Response value current of the instantaneous short-circuit release | A | 52 |

UL/CSA ratings:

| | | |
|--|--------------|-------------|
| Full-load current (FLA) for three-phase AC motor | | |
| <ul style="list-style-type: none"> • at 480 V Rated value • at 600 V Rated value | A | 4 |
| | A | 4 |
| yielded mechanical performance [hp] | | |
| <ul style="list-style-type: none"> • for single-phase AC motor at 110/120 V Rated value • for single-phase AC motor at 230 V Rated value • for three-phase AC motor at 200/208 V Rated value • for three-phase AC motor at 220/230 V Rated value • for three-phase AC motor at 460/480 V Rated value • for three-phase AC motor at 575/600 V Rated value | metric hp | 0.125 |
| | metric hp | 0.333 |
| | metric hp | 0.75 |
| | metric hp | 0.75 |
| | metric hp | 2 |
| | metric hp | 3 |
| Contact rating of the auxiliary contacts acc. to UL | | C300 / R300 |

Short-circuit:

| | | |
|---|--|--|
| Product function Short circuit protection | | Yes |
| Design of the short-circuit trip | | magnetic |
| Design of the fuse link | | |
| <ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required | | Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current I _k < 400 A) |
| Design of the fuse link for IT network for short-circuit protection of the main circuit | | |
| <ul style="list-style-type: none"> • at 400 V • at 500 V | | gL/gG 32 A |
| | | gL/gG 32 A |

- at 690 V

gL/gG 25 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 | mm | 97 |
| Width | mm | 45 |
| Depth | mm | 96 |
| Required spacing | | |
| <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side | mm | 0 0 50 50 0 0 0 50 30 50 0 0 50 50 30 |

Connections/ Terminals:

| | | |
|---|--|--|
| Type of electrical connection | | |
| <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit | | screw-type terminals screw-type terminals |
| Arrangement of electrical connectors for main current circuit | | Top and bottom |
| Product function | | |
| <ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit | | No |
| Type of connectable conductor cross-section | | |
| <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing • for AWG conductors for main contacts | | 2x (0,75 ... 2,5 mm ²), 2x 4 mm ² 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (18 ... 14), 2x 12 |

| | | |
|---|-----|--|
| <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing • for AWG conductors for auxiliary contacts | | 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14) |
| Tightening torque | | |
| <ul style="list-style-type: none"> • for main contacts with screw-type terminals | N·m | 0.8 ... 1.2 |
| Design of screwdriver shaft | | Diameter 5 to 6 mm |
| Design of the thread of the connection screw | | |
| <ul style="list-style-type: none"> • for main contacts • of the auxiliary and control contacts | | M3 M3 |

Safety related data:

| | | |
|--|-----|-------------|
| B10 value with high demand rate acc. to SN 31920 | | 50 000 |
| Proportion of dangerous failures | | |
| <ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 | % | 40 |
| <ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 | % | 40 |
| Failure rate [FIT] with low demand rate acc. to SN 31920 | FIT | 50 |
| T1 value for proof test interval or service life acc. to IEC 61508 | y | 10 |
| Protection against electrical shock | | finger-safe |

Mechanical data:

| | | |
|------------------------------------|--|-----|
| Size of the circuit-breaker | | S00 |
|------------------------------------|--|-----|

Ambient conditions:

| | | |
|--|----|-------------|
| Installation altitude at height above sea level maximum | m | 2 000 |
| Ambient temperature | | |
| <ul style="list-style-type: none"> • during operation | °C | -20 ... +60 |
| <ul style="list-style-type: none"> • during storage | °C | -50 ... +80 |
| <ul style="list-style-type: none"> • during transport | °C | -50 ... +80 |
| Relative humidity during operation | % | 10 ... 95 |

Display:

| | | |
|--|--|--------|
| Display version | | |
| <ul style="list-style-type: none"> • for switching status | | Handle |

Certificates/ approvals:

| | |
|--------------------------|---------------------------|
| General Product Approval | Declaration of Conformity |
|--------------------------|---------------------------|



[KTL](#)



| | |
|-------------------|-------------------|
| Test Certificates | Shipping Approval |
|-------------------|-------------------|

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Declaration of the Compliance with the order](#)



| | |
|-------------------|-------|
| Shipping Approval | other |
|-------------------|-------|



[Environmental Confirmations](#)

| |
|-------|
| other |
|-------|

[Confirmation](#)



[other](#)

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|---------------------|
| 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

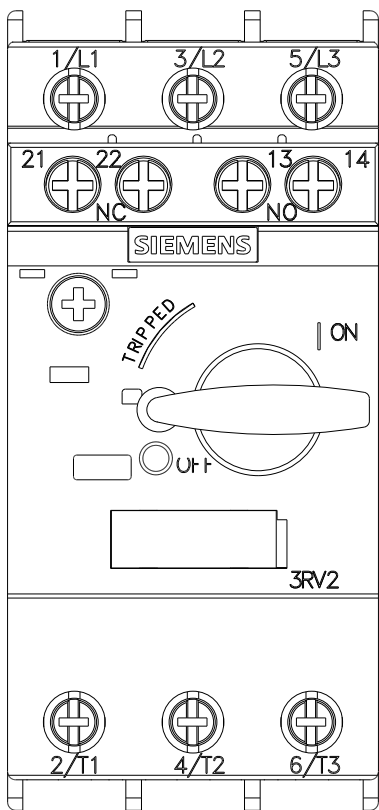
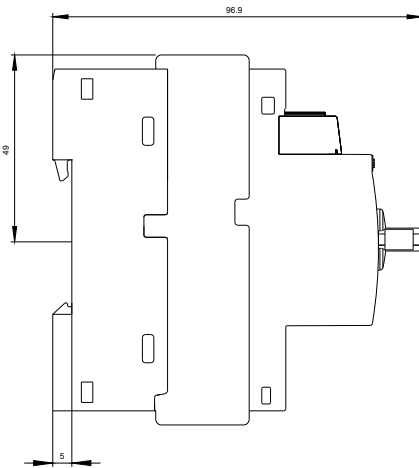
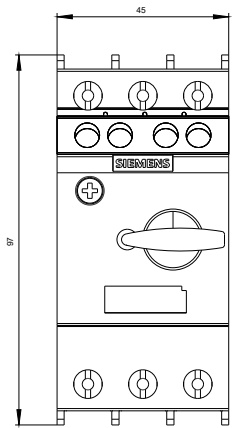
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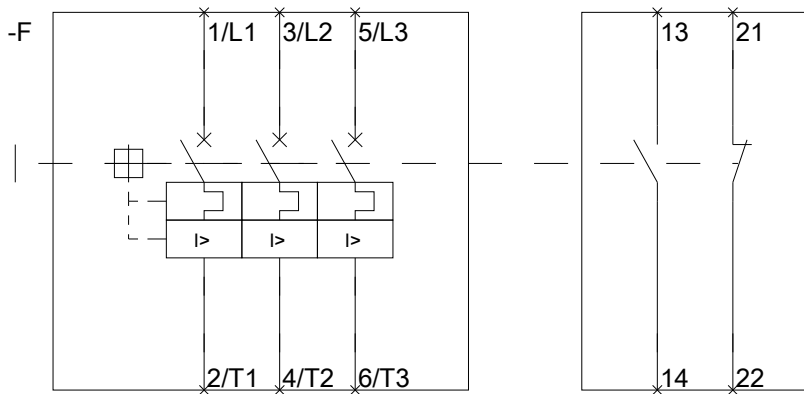
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RV20111EA15/all>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20111EA15&lang=en





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