



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-REL. 7...10A, N-REL. 130A SCREW CONNECTION, STANDARD SW. CAPACITY

Figure similar

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

| General technical data: | | |
|---|----|--------------------|
| Active power loss total typical | W | 7 |
| Insulation voltage | V | 690 |
| <ul style="list-style-type: none"> with degree of pollution 3 Rated value | | |
| Shock resistance | | 25g / 11 ms |
| <ul style="list-style-type: none"> acc. to IEC 60068-2-27 | | |
| Surge voltage resistance Rated value | kV | 6 |
| Mechanical service life (switching cycles) | | |
| <ul style="list-style-type: none"> of the main contacts typical of the auxiliary contacts typical | | 100 000 100 000 |
| Electrical endurance (switching cycles) | | 100 000 |
| <ul style="list-style-type: none"> typical | | |
| Temperature compensation | °C | -20 ... +60 |
| Size of contactor can be combined company-specific | | S0 |
| Protection class IP | | |
| <ul style="list-style-type: none"> on the front of the terminal | | IP20 IP20 |
| Type of protection | | Increased safety |
| Equipment marking | | Q |
| <ul style="list-style-type: none"> acc. to DIN EN 81346-2 | | |

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

| | | |
|--|-----|-----------|
| Adjustable response value current of the current-dependent overload release | A | 7 ... 10 |
| 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 | 10 |
| Operating current | | |
| • at AC-3 | | |
| — at 400 V Rated value | A | 10 |
| Operating power | | |
| • at AC-3 | | |
| — at 230 V Rated value | W | 2 200 |
| — at 400 V Rated value | W | 4 000 |
| — at 500 V Rated value | W | 5 500 |
| — at 690 V Rated value | W | 7 500 |
| Operating frequency | | |
| • at AC-3 maximum | 1/h | 15 |

Auxiliary circuit:

| | | |
|---|--|-----|
| Number of NC contacts | | |
| • for auxiliary contacts | | 0 |
| Number of NO contacts | | |
| • for auxiliary contacts | | 0 |
| Number of CO contacts | | |
| • for auxiliary contacts | | 0 |
| Product expansion Auxiliary switch | | Yes |

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 | 42 |
| • at 500 V Rated value | kA | 42 |
| • at 690 V Rated value | kA | 4 |
| Maximum short-circuit current breaking capacity (Icu) | | |
| • with AC at 240 V Rated value | kA | 100 |
| • with AC at 400 V Rated value | kA | 100 |
| • with AC at 500 V Rated value | kA | 42 |
| • with AC at 690 V Rated value | kA | 6 |
| Breaking capacity short-circuit current (Icn) | | |
| • with 1 current path for DC at 150 V Rated value | kA | 10 |

| | | |
|--|----|-----|
| <ul style="list-style-type: none"> with 2 current paths in series for DC at 300 V Rated value | kA | 10 |
| <ul style="list-style-type: none"> with 3 current paths in series for DC at 450 V Rated value | kA | 10 |
| Response value current of the instantaneous short-circuit release | A | 130 |

UL/CSA ratings:

| | | |
|--|--------------|-----|
| Full-load current (FLA) for three-phase AC motor | | |
| <ul style="list-style-type: none"> at 480 V Rated value | A | 10 |
| <ul style="list-style-type: none"> at 600 V Rated value | A | 10 |
| yielded mechanical performance [hp] | | |
| <ul style="list-style-type: none"> for single-phase AC motor at 110/120 V Rated value | metric hp | 0.5 |
| <ul style="list-style-type: none"> for single-phase AC motor at 230 V Rated value | metric hp | 1.5 |
| <ul style="list-style-type: none"> for three-phase AC motor at 200/208 V Rated value | metric hp | 2 |
| <ul style="list-style-type: none"> for three-phase AC motor at 220/230 V Rated value | metric hp | 3 |
| <ul style="list-style-type: none"> for three-phase AC motor at 460/480 V Rated value | metric hp | 5 |
| <ul style="list-style-type: none"> for three-phase AC motor at 575/600 V Rated value | metric hp | 7.5 |

Short-circuit:

| | | |
|--|--|----------|
| Product function Short circuit protection | | Yes |
| Design of the short-circuit trip | | magnetic |

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 | mm | 0 |
| | mm | 0 |
| | mm | 50 |
| | mm | 50 |
| | mm | 0 |
| | mm | 0 |

| | | |
|------------------|----|----|
| — Backwards | mm | 0 |
| — upwards | mm | 50 |
| — at the side | mm | 30 |
| — downwards | mm | 50 |
| • for live parts | | |
| — forwards | mm | 0 |
| — Backwards | mm | 0 |
| — upwards | mm | 50 |
| — downwards | mm | 50 |
| — at the side | mm | 30 |

Connections/ Terminals:

| | | |
|--|-----|---|
| Type of electrical connection | | |
| • for main current circuit | | screw-type terminals |
| Arrangement of electrical connectors for main current circuit | | Top and bottom |
| Product function | | |
| • removable terminal for auxiliary and control circuit | | No |
| Type of connectable conductor cross-section | | |
| • for main contacts | | |
| — single or multi-stranded | | 2x (1 ... 2,5 mm ²), 2x (2,5 ... 10 mm ²) |
| — finely stranded with core end processing | | 2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ² |
| • for AWG conductors for main contacts | | 2x (16 ... 12), 2x (14 ... 8) |
| Tightening torque | | |
| • for main contacts with screw-type terminals | N·m | 2 ... 2.5 |
| Design of screwdriver shaft | | Diameter 5 to 6 mm |
| Design of the thread of the connection screw | | |
| • for main contacts | | M4 |

Safety related data:

| | | |
|---|-----|-------------|
| B10 value with high demand rate acc. to SN 31920 | | 50 000 |
| Proportion of dangerous failures | | |
| • with low demand rate acc. to SN 31920 | % | 40 |
| • 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 | | S0 |
|------------------------------------|--|----|

Ambient conditions:

| | | |
|---|--------------------|----------------|
| Installation altitude at height above sea level maximum | m | 2 000 |
| Ambient temperature | • during operation | °C -20 ... +60 |
| | • during storage | °C -50 ... +80 |
| | • during transport | °C -50 ... +80 |
| Relative humidity during operation | % | 10 ... 95 |

Display:

| | |
|------------------------|--------|
| Display version | |
| • for switching status | Handle |

Certificates/ approvals:

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



[KTL](#)



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

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

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



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



[Confirmation](#)

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

[Environmental Confirmations](#)



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Further information

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

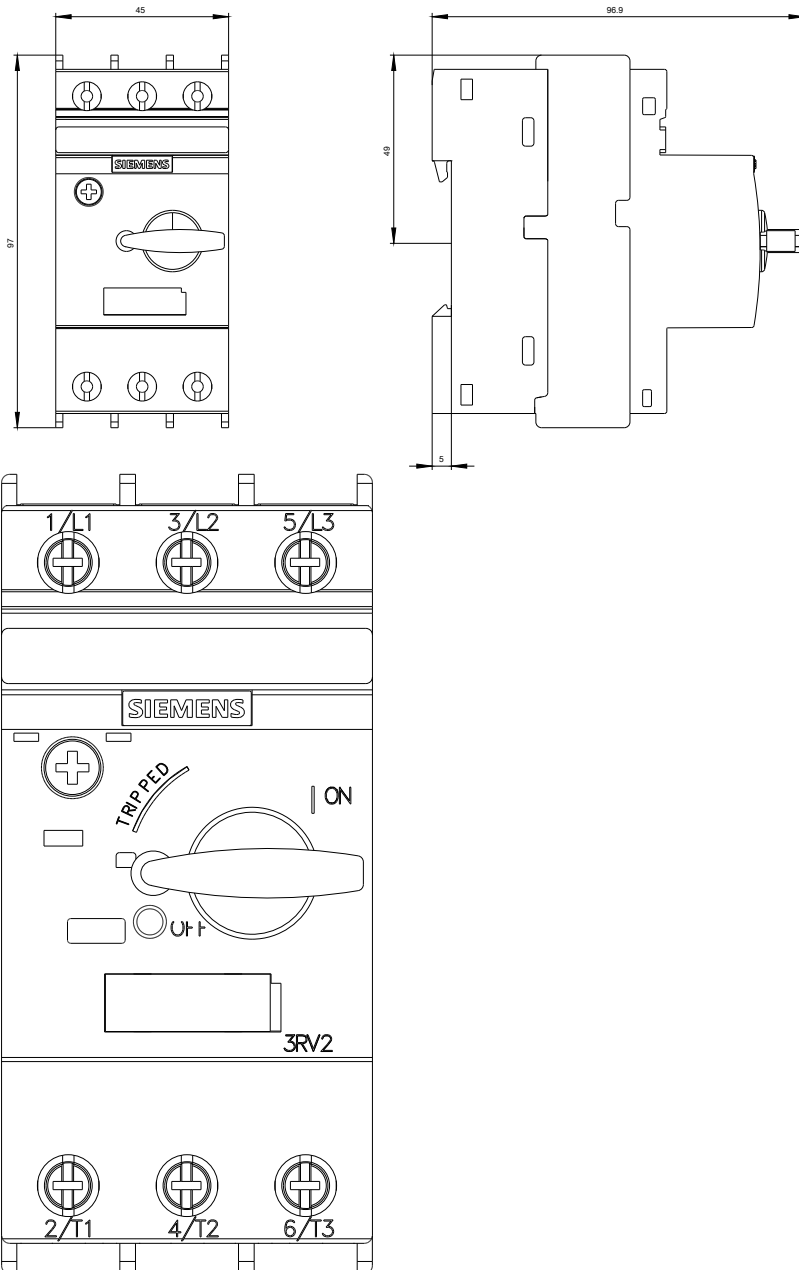
<http://www.siemens.com/industrial-controls/catalogs>

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