



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 5.5...8A, N-RELEASE 104A, SPRING-L. CONNECTION, STANDARD SW. CAPACITY

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

General technical data:

| | |
|--|------------------|
| Size of contactor can be combined company-specific | S2 |
| Product expansion | Yes |
| • Auxiliary switch | Yes |
| Active power loss total typical | 7 W |
| Insulation voltage | 690 V |
| • with degree of pollution 3 Rated value | 690 V |
| Surge voltage resistance Rated value | 6 kV |
| Protection class IP | IP20 |
| • on the front | IP20 |
| • of the terminal | IP20 |
| Mechanical service life (switching cycles) | 100 000 |
| • of the main contacts typical | 100 000 |
| • of the auxiliary contacts typical | 100 000 |
| Electrical endurance (switching cycles) | 100 000 |
| • typical | 100 000 |
| Temperature compensation | -20 ... +60 °C |
| Type of protection | Increased safety |

Ambient conditions:

| | |
|---|----------------|
| Installation altitude at height above sea level maximum | 2 000 m |
| Ambient temperature | -20 ... +60 °C |
| • during operation | -20 ... +60 °C |

| | |
|--|----------------|
| <ul style="list-style-type: none"> during storage | -50 ... +80 °C |
| <ul style="list-style-type: none"> during transport | -50 ... +80 °C |
| Relative humidity during operation | 10 ... 95 % |

Main circuit:

| | |
|--|--------------|
| Adjustable response value current of the current-dependent overload release | 5.5 ... 8 A |
| Operating voltage | |
| <ul style="list-style-type: none"> Rated value | 690 V |
| <ul style="list-style-type: none"> at AC-3 Rated value maximum | 690 V |
| Operating frequency Rated value | 50 ... 60 Hz |
| Operating current Rated value | 8 A |
| Operating current | |
| <ul style="list-style-type: none"> at AC-3 | |
| <ul style="list-style-type: none"> — at 400 V Rated value | 8 A |
| Operating power | |
| <ul style="list-style-type: none"> at AC-3 | |
| <ul style="list-style-type: none"> — at 230 V Rated value | 1 500 W |
| <ul style="list-style-type: none"> — at 400 V Rated value | 3 000 W |
| <ul style="list-style-type: none"> — at 500 V Rated value | 4 000 W |
| <ul style="list-style-type: none"> — at 690 V Rated value | 5 500 W |
| Operating frequency | |
| <ul style="list-style-type: none"> at AC-3 maximum | 15 1/h |

Auxiliary circuit:

| | |
|--|---|
| Number of NC contacts | |
| <ul style="list-style-type: none"> for auxiliary contacts | 0 |
| Number of NO contacts | |
| <ul style="list-style-type: none"> for auxiliary contacts | 0 |
| Number of CO contacts | |
| <ul style="list-style-type: none"> for auxiliary contacts | 0 |

Protective and monitoring functions:

| | |
|--|----------|
| Trip class | CLASS 10 |
| Design of the overload circuit breaker | thermal |
| Operational short-circuit current breaking capacity (Ics) at AC | |
| <ul style="list-style-type: none"> at 240 V Rated value | 100 kA |
| <ul style="list-style-type: none"> at 400 V Rated value | 100 kA |
| <ul style="list-style-type: none"> at 500 V Rated value | 42 kA |
| <ul style="list-style-type: none"> at 690 V Rated value | 4 kA |
| Maximum short-circuit current breaking capacity (Icu) | |
| <ul style="list-style-type: none"> at AC at 240 V Rated value | 100 kA |
| <ul style="list-style-type: none"> with AC at 400 V Rated value | 100 kA |

| | |
|--|--|
| <ul style="list-style-type: none"> • at AC at 500 V Rated value • at AC at 690 V Rated value | <p>42 kA</p> <p>6 kA</p> |
| Breaking capacity short-circuit current (Icn) | |
| <ul style="list-style-type: none"> • with 1 current path at DC at 150 V Rated value • with 2 current paths in series at DC at 300 V Rated value • with 3 current paths in series at DC at 450 V Rated value | <p>10 kA</p> <p>10 kA</p> <p>10 kA</p> |
| Response value current of the instantaneous short-circuit release | 104 A |

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 | <p>8 A</p> <p>8 A</p> |
| yielded mechanical performance [hp] | |
| <ul style="list-style-type: none"> • for single-phase AC motor <ul style="list-style-type: none"> — at 110/120 V Rated value — at 230 V Rated value • for three-phase AC motor <ul style="list-style-type: none"> — at 200/208 V Rated value — at 220/230 V Rated value — at 460/480 V Rated value — at 575/600 V Rated value | <p>0.333 hp</p> <p>1 hp</p> <p>2 hp</p> <p>2 hp</p> <p>5 hp</p> <p>5 hp</p> |

Short-circuit:

| | |
|--|---|
| Design of the short-circuit trip | magnetic |
| 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 • at 690 V | <p>gL/gG 50 A</p> <p>gL/gG 40 A</p> <p>gL/gG 35 A</p> |

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 | 106 mm |
| Width | 45 mm |
| Depth | 96 mm |
| Required spacing | |
| <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards | <p>0 mm</p> <p>0 mm</p> <p>50 mm</p> |

| | |
|----------------------|-------|
| — 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 | spring-loaded terminals |
| Arrangement of electrical connectors for main current circuit | Top and bottom |
| Type of connectable conductor cross-section | |
| • for main contacts | |
| — single or multi-stranded | 2x (0,5 ... 4 mm ²) |
| — finely stranded with core end processing | 2x (0.5 ... 2.5 mm ²) |
| — finely stranded without core end processing | 2x (0.5 ... 2.5 mm ²) |
| • for AWG conductors for main contacts | 2x (20 ... 12) |
| Design of screwdriver shaft | Diameter 5 to 6 mm |

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 % |
| T1 value for proof test interval or service life acc. to IEC 61508 | 10 y |

Mechanical data:

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

Display:

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|------------------------|--|
| Display version | |
|------------------------|--|

- for switching status

Handle

Certificates/ approvals:

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|---------------------------------|---------------------------------------|----------------------------------|
| General Product Approval | For use in hazardous locations | Declaration of Conformity |
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[KTL](#)



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

[spezielle Prüfbescheinigung](#)

[Werksbescheinigung](#)

[Typprüfbescheinigung/Werkszeugnis](#)



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



[Bestätigungen](#)

| |
|--------------|
| other |
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[Umweltbestätigung](#)



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

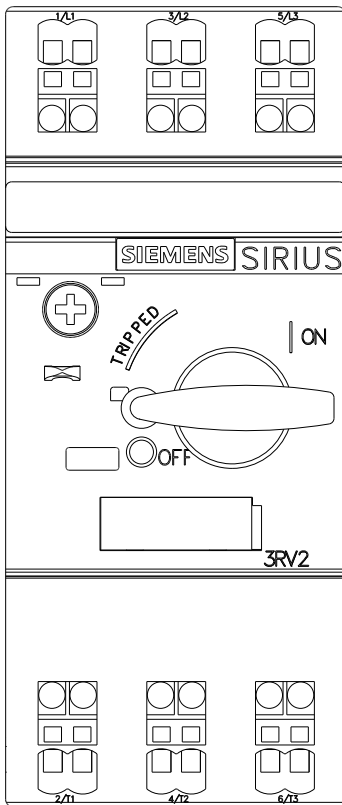
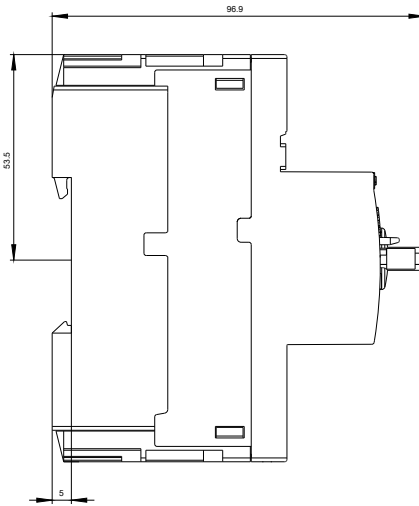
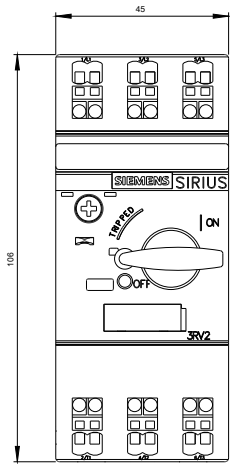
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV20111HA20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV20111HA20>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20111HA20&lang=en





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