



CIRCUIT BREAKER, SIZE S2, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 42...52A, N-RELEASE 741A, SCREW TERMINAL, STANDARD BREAKING CAPACITY W. TRANSV. AUX. SWITCH 1NO+1NC

Figure similar

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

General technical data:

| | | |
|--|----|-------------------|
| Active power loss total typical | W | 17 |
| Insulation voltage | V | 690 |
| <ul style="list-style-type: none"> with degree of pollution 3 Rated value | | |
| Shock resistance | | 25g / 11 ms Sinus |
| <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 | | 50 000 |
| <ul style="list-style-type: none"> of the auxiliary contacts typical | | 50 000 |
| Electrical endurance (switching cycles) | | |
| <ul style="list-style-type: none"> typical | | 50 000 |
| Temperature compensation | °C | -20 ... +60 |
| Size of contactor can be combined company-specific | | S2 |
| Protection class IP | | |
| <ul style="list-style-type: none"> on the front | | IP20 |
| <ul style="list-style-type: none"> of the terminal | | IP00 |
| Equipment marking | | |
| <ul style="list-style-type: none"> 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 | 42 ... 52 |

| | | |
|--------------------------------------|-----|-----------|
| 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 | 52 |
| Operating current | | |
| • at AC-3 | | |
| — at 400 V Rated value | A | 52 |
| Operating power | | |
| • at AC-3 | | |
| — at 230 V Rated value | W | 15 000 |
| — at 500 V Rated value | W | 30 000 |
| — at 690 V Rated value | W | 45 000 |
| Operating frequency | | |
| • at AC-3 maximum | 1/h | 15 |

Auxiliary circuit:

| | | |
|---|---|------------|
| Number of NC contacts | | |
| • for auxiliary contacts | | 1 |
| — Note | | 1 |
| Number of NO contacts | | |
| • for auxiliary contacts | | 1 |
| — Note | | 1 |
| 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 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 |
| • at 110 V | A | 0 |
| • at 125 V | A | 0 |
| • at 220 V | A | 0 |

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 | A | 100 |
| • at 400 V Rated value | kA | 30 |
| • at 500 V Rated value | kA | 4 |

| | | |
|--|----|-----|
| <ul style="list-style-type: none"> • at 690 V Rated value | kA | 2 |
| Maximum short-circuit current breaking capacity (I_{cu}) | | |
| <ul style="list-style-type: none"> • with AC at 240 V Rated value | kA | 100 |
| <ul style="list-style-type: none"> • with AC at 400 V Rated value | kA | 65 |
| <ul style="list-style-type: none"> • with AC at 500 V Rated value | kA | 8 |
| <ul style="list-style-type: none"> • with AC at 690 V Rated value | kA | 4 |
| Response value current of the instantaneous short-circuit release | A | 741 |

UL/CSA ratings:

| | | |
|--|--------------|-------------|
| Full-load current (FLA) for three-phase AC motor | | |
| <ul style="list-style-type: none"> • at 480 V Rated value | A | 52 |
| <ul style="list-style-type: none"> • at 600 V Rated value | A | 52 |
| yielded mechanical performance [hp] | | |
| <ul style="list-style-type: none"> • for single-phase AC motor at 110/120 V Rated value | metric hp | 5 |
| <ul style="list-style-type: none"> • for single-phase AC motor at 230 V Rated value | metric hp | 10 |
| <ul style="list-style-type: none"> • for three-phase AC motor at 200/208 V Rated value | metric hp | 15 |
| <ul style="list-style-type: none"> • for three-phase AC motor at 220/230 V Rated value | metric hp | 20 |
| <ul style="list-style-type: none"> • for three-phase AC motor at 460/480 V Rated value | metric hp | 40 |
| <ul style="list-style-type: none"> • for three-phase AC motor at 575/600 V Rated value | metric hp | 50 |
| 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 240 V | | none required |
| <ul style="list-style-type: none"> • at 400 V | | 160 |
| <ul style="list-style-type: none"> • at 500 V | | 125 |
| <ul style="list-style-type: none"> • at 690 V | | 100 |

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 | 140 |

| | | |
|--|----|-----|
| Width | mm | 55 |
| Depth | mm | 149 |
| 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 |
| | mm | 0 |
| | mm | 50 |
| | mm | 50 |
| | mm | 0 |
| | mm | 0 |
| | mm | 0 |
| | mm | 50 |
| | mm | 10 |
| | mm | 50 |
| | mm | 0 |
| | mm | 0 |
| | mm | 50 |
| | mm | 50 |
| | mm | 10 |

| 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 | | No |
| <ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit | | |
| 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 • 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 (1 ... 35 mm ²), 1x (1 ... 50 mm ²) 2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²) 2x (18 ... 2), 1x (18 ... 1) 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 | 3 ... 4.5 |
| 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 | | M6 |
| <ul style="list-style-type: none"> • of the auxiliary and control contacts | | M3 |

Safety related data:

| | | |
|--|--|--|
| Protection against electrical shock | | finger-safe when touched vertically from front acc. to IEC 60529 |
|--|--|--|

Mechanical data:

| | | |
|------------------------------------|--|----|
| Size of the circuit-breaker | | S2 |
|------------------------------------|--|----|



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 | other |
|  CSA |  UL |
| | Confirmation |
| | 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

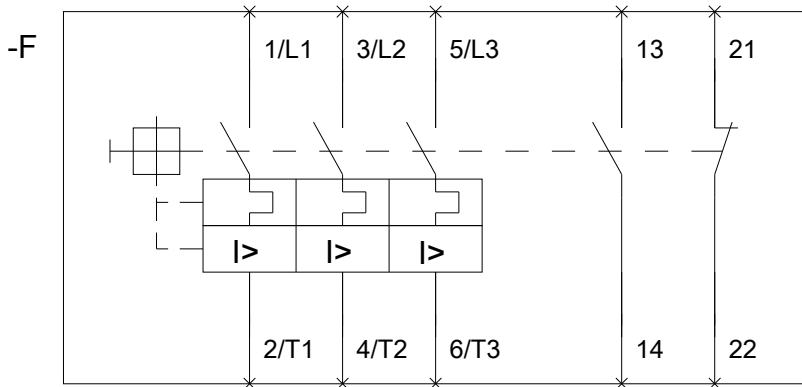
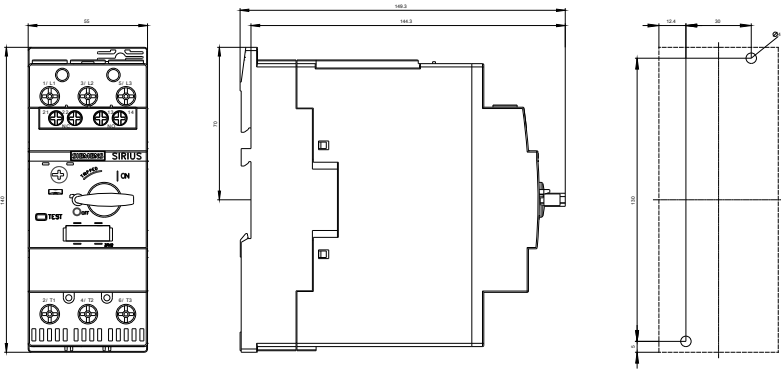
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV20314WA15>

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

<http://support.automation.siemens.com/WW/view/en/3RV20314WA15/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=3RV20314WA15&lang=en



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