



Circuit breaker size S0 for motor protection, Class 10 A-release 0.14...0.2 A  
Short-circuit release 2.6 A Screw terminal Standard switching capacity

|  |                      |
|--|----------------------|
| <b>product brand name</b>  | SIRIUS               |
| <b>product designation</b>   | Circuit breaker      |
| <b>design of the product</b>   | For motor protection |
| <b>product type designation</b>  | 3RV2                 |
| <b>General technical data</b>  |                      |
| <b>size of the circuit-breaker</b>   | S0                   |
| <b>size of contactor can be combined company-specific</b>                                  | S00, S0              |
| product extension auxiliary switch   | Yes                  |
| <b>power loss [W] for rated value of the current</b>                                       |                      |
| • at AC in hot operating state   | 5.5 W                |
| • at AC in hot operating state per pole  | 1.8 W                |
| insulation voltage with degree of pollution 3 at AC rated value                            | 690 V                |
| <b>surge voltage resistance rated value</b>  | 6 kV                 |
| <b>maximum permissible voltage for safe isolation in networks with grounded star point</b> |                      |
| • between main and auxiliary circuit   | 400 V                |
| • between main and auxiliary circuit   | 400 V                |
| shock resistance acc. to IEC 60068-2-27  | 25g / 11 ms          |
| <b>mechanical service life (switching cycles)</b>  |                      |
| • of the main contacts typical   | 100 000              |
| • of auxiliary contacts typical  | 100 000              |
| electrical endurance (switching cycles) typical  | 100 000              |
| <b>type of protection according to ATEX directive 2014/34/EU</b>                           | Ex II (2) GD         |
| certificate of suitability according to ATEX directive 2014/34/EU                          | DMT 02 ATEX F 001    |
| <b>reference code acc. to IEC 81346-2</b>  | Q                    |
| Substance Prohibitance (Date)  | 01.10.2009 00:00:00  |
| <b>Ambient conditions</b>  |                      |
| installation altitude at height above sea level maximum                                    | 2 000 m              |
| <b>ambient temperature</b>   |                      |
| • during operation   | -20 ... +60 °C       |
| • during storage   | -50 ... +80 °C       |
| • during transport   | -50 ... +80 °C       |
| <b>temperature compensation</b>  | -20 ... +60 °C       |
| relative humidity during operation   | 10 ... 95 %          |
| <b>Main circuit</b>  |                      |

|  |  |
|--|--|
| <b>number of poles for main current circuit</b>  | 3  |
| <b>adjustable current response value current of the current-dependent overload release</b> | 0.14 ... 0.2 A   |
| <b>operating voltage</b>   |  |
| • rated value  | 690 V  |
| • at AC-3 rated value maximum  | 690 V  |
| <b>operating frequency rated value</b>   | 50 ... 60 Hz   |
| <b>operational current rated value</b>   | 0.2 A  |
| operational current at AC-3 at 400 V rated value   | 0.2 A  |
| <b>operating power at AC-3</b>   |  |
| • at 230 V rated value   | 0.03 kW  |
| • at 400 V rated value   | 0.06 kW  |
| • at 500 V rated value   | 0.06 kW  |
| • at 690 V rated value   | 0.09 kW  |
| operating frequency at AC-3 maximum  | 15 1/h   |
| <b>Auxiliary circuit</b>   |  |
| <b>number of NC contacts for auxiliary contacts</b>  | 0  |
| <b>number of NO contacts for auxiliary contacts</b>  | 0  |
| number of CO contacts for auxiliary contacts   | 0  |
| <b>Protective and monitoring functions</b>   |  |
| <b>product function</b>  |  |
| • ground fault detection   | No   |
| • phase failure detection  | Yes  |
| <b>trip class</b>  | CLASS 10   |
| <b>design of the overload release</b>  | thermal  |
| <b>breaking capacity operating short-circuit current (Ics) at AC</b>                       |  |
| • 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   | 100 kA   |
| <b>breaking capacity maximum short-circuit current (Icu)</b>                               |  |
| • 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   | 100 kA   |
| response value current of instantaneous short-circuit trip unit                            | 2.6 A  |
| <b>UL/CSA ratings</b>  |  |
| <b>full-load current (FLA) for 3-phase AC motor</b>  |  |
| • at 480 V rated value   | 0.2 A  |
| • at 600 V rated value   | 0.2 A  |
| <b>Short-circuit protection</b>  |  |
| <b>product function short circuit protection</b>   | Yes  |
| <b>design of the short-circuit trip</b>  | magnetic   |
| <b>Installation/ mounting/ dimensions</b>  |  |
| <b>mounting position</b>   | any  |
| <b>fastening method</b>  | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| <b>height</b>  | 97 mm  |
| <b>width</b>   | 45 mm  |
| <b>depth</b>   | 97 mm  |
| <b>required spacing</b>  |  |
| • for grounded parts at 400 V  |  |
| — downwards  | 30 mm  |
| — upwards  | 30 mm  |
| — at the side  | 9 mm   |
| • for live parts at 400 V  |  |
| — downwards  | 30 mm  |

|   |   |
|---|---|
| — upwards   | 30 mm   |
| — at the side   | 9 mm  |
| • for grounded parts at 500 V   |   |
| — downwards   | 30 mm   |
| — upwards   | 30 mm   |
| — at the side   | 9 mm  |
| • for live parts at 500 V   |   |
| — downwards   | 30 mm   |
| — upwards   | 30 mm   |
| — at the side   | 9 mm  |
| • for grounded parts at 690 V   |   |
| — downwards   | 50 mm   |
| — upwards   | 50 mm   |
| — backwards   | 0 mm  |
| — at the side   | 30 mm   |
| — forwards  | 0 mm  |
| • for live parts at 690 V   |   |
| — downwards   | 50 mm   |
| — upwards   | 50 mm   |
| — backwards   | 0 mm  |
| — at the side   | 30 mm   |
| — forwards  | 0 mm  |
| <b>Connections/ Terminals</b>   |   |
| product function removable terminal for auxiliary and control circuit     | No  |
| <b>type of electrical connection</b>                                      |   |
| • for main current circuit  | screw-type terminals  |
| <b>arrangement of electrical connectors for main current circuit</b>      | Top and bottom  |
| <b>type of connectable conductor cross-sections</b>                       |   |
| • for main contacts   |   |
| — solid or stranded   | 2x (1 ... 2,5 mm <sup>2</sup> ), 2x (2,5 ... 10 mm <sup>2</sup> )                       |
| — finely stranded with core end processing                                | 2x (1 ... 2,5 mm <sup>2</sup> ), 2x (2,5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup> |
| • at AWG cables for main contacts   | 2x (16 ... 12), 2x (14 ... 8)   |
| <b>tightening torque</b>  |   |
| • for main contacts with screw-type terminals                             | 2 ... 2.5 N·m   |
| <b>design of screwdriver shaft</b>  | Diameter 5 to 6 mm  |
| <b>size of the screwdriver tip</b>  | Pozidriv 2  |
| <b>design of the thread of the connection screw</b>                       |   |
| • for main contacts   | M4  |
| <b>Safety related data</b>  |   |
| <b>B10 value</b>  |   |
| • with high demand rate acc. to SN 31920                                  | 5 000   |
| <b>proportion of dangerous failures</b>                                   |   |
| • with low demand rate acc. to SN 31920                                   | 50 %  |
| • with high demand rate acc. to SN 31920                                  | 50 %  |
| <b>failure rate [FIT]</b>   |   |
| • with low demand rate acc. to SN 31920                                   | 50 FIT  |
| <b>T1 value for proof test interval or service life acc. to IEC 61508</b> | 10 y  |
| <b>protection class IP on the front acc. to IEC 60529</b>                 | IP20  |
| <b>touch protection on the front acc. to IEC 60529</b>                    | finger-safe, for vertical contact from the front  |
| display version for switching status                                      | Handle  |
| <b>Certificates/ approvals</b>  |   |
| <b>General Product Approval</b>   | <b>For use in hazardous locations</b>   |



[KC](#)



|                                |                           |                   |  |                   |
|--------------------------------|---------------------------|-------------------|--|-------------------|
| For use in hazardous locations | Declaration of Conformity | Test Certificates |  | Marine / Shipping |
|--------------------------------|---------------------------|-------------------|--|-------------------|



IECEX

[Miscellaneous](#)



EG-Konf.

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



ABS

### Marine / Shipping



BUREAU VERITAS



LRS



PRS



RINA



RMRS



DNV-GL

|       |         |  |
|-------|---------|--|
| other | Railway |  |
|-------|---------|--|

[Confirmation](#)

[Confirmation](#)

[Vibration and Shock](#)

### Further information

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2021-0BA10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-0BA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-0BA10>

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

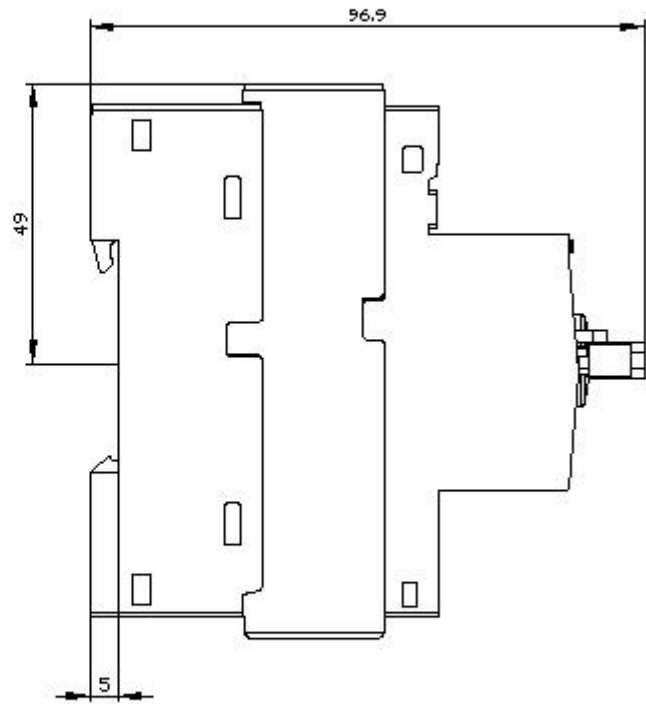
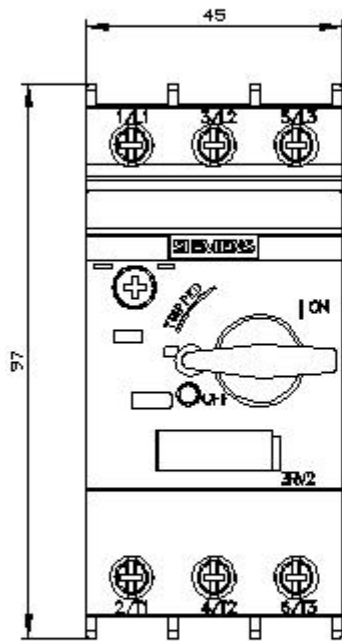
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2021-0BA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-0BA10&lang=en)

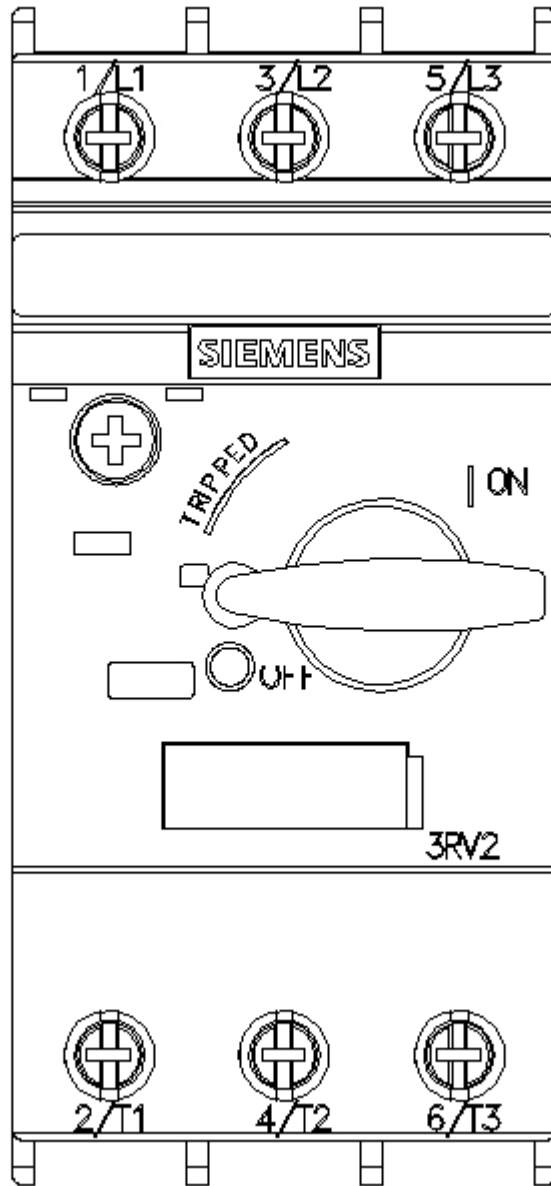
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-0BA10/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2021-0BA10&objecttype=14&gridview=view1>







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