



Circuit breaker size S00 for fuse monitoring Screw terminal A-release 0.2 A N-release 1.2 A

|   |                     |
|---|---------------------|
| <b>product brand name</b>   | SIRIUS              |
| <b>product designation</b>  | Circuit breaker     |
| <b>design of the product</b>  | for fuse monitoring |
| <b>product type designation</b>   | 3RV1                |
| <b>General technical data</b>   |                     |
| <b>Product equipment of circuit breaker for motor protection complete unit with protection device</b> | Yes                 |
| <b>size of the circuit-breaker</b>  | S00                 |
| product function disconnecter functionality   | Yes                 |
| 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               |
| <b>type of calculation of power loss current-dependent</b>  | quadratic           |
| 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 protective separation</b>  |                     |
| • in networks with ungrounded star point between main and auxiliary circuit                           | 400 V               |
| • in networks with grounded star point between main and auxiliary circuit                             | 400 V               |
| <b>protection class IP</b>  |                     |
| • on the front according to IEC 60529   | IP20                |
| • on the front  | IP20                |
| • of the terminal   | IP00                |
| <b>mechanical service life (operating cycles)</b>   |                     |
| • of the main contacts typical  | 100 000             |
| • of auxiliary contacts typical   | 100 000             |
| electrical endurance (operating cycles) typical   | 100 000             |
| <b>reference code according to IEC 81346-2</b>  | Q                   |
| <b>continuous current rated value</b>   | 0.2 A               |
| <b>Substance Prohibitance (day/month/year)</b>  | 01/01/2013          |
| <b>Net Weight</b>   | 232 g               |
| <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      |

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| relative humidity during operation  | 10 ... 95 %  |
| <b>Main circuit</b>   |  |
| number of poles for main current circuit  | 3  |
| type of voltage for main current circuit  | AC/DC  |
| operating voltage   |  |
| • rated value   | 690 V  |
| • rated value   | 20 ... 690 V   |
| • at AC-3 rated value maximum   | 690 V  |
| • at AC-3e rated value maximum  | 690 V  |
| operating frequency rated value   | 50 ... 60 Hz   |
| operational current rated value   | 0.2 A  |
| operational current   |  |
| • at AC-3 at 400 V rated value  | 0.2 A  |
| • at AC-3e at 400 V rated value   | 0.2 A  |
| operating frequency   |  |
| • at AC-3 maximum   | 15 1/h   |
| • at AC-3e maximum  | 15 1/h   |
| <b>Auxiliary circuit</b>  |  |
| type of voltage for auxiliary and control circuit                                       | AC/DC  |
| number of NC contacts for auxiliary contacts  | 0  |
| number of NO contacts for auxiliary contacts  | 0  |
| number of CO contacts for auxiliary contacts  | 0  |
| <b>Protective and monitoring functions</b>  |  |
| product function  |  |
| • ground fault detection  | No   |
| • phase failure detection   | Yes  |
| design of the overload release  | thermal  |
| protection function thermal overload protection (ANSI 49)                               | Yes  |
| maximum short-circuit current breaking capacity (Icu)                                   |  |
| • 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   |
| operating short-circuit current breaking capacity (Ics) at AC                           |  |
| • 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   |
| short-circuit current breaking capacity (Icn)   |  |
| • at 1 current path at DC at 150 V rated value  | 10 kA  |
| • with 2 current paths in series at DC at 300 V rated value                             | 10 kA  |
| • with 3 current paths in series at DC at 450 V rated value                             | 10 kA  |
| response value current of instantaneous short-circuit trip unit                         | 1.2 A  |
| <b>UL/CSA ratings</b>   |  |
| full-load current (FLA) for 3-phase AC motor  |  |
| • at 480 V rated value  | 0.2 A  |
| • at 600 V rated value  | 0.2 A  |
| <b>Short-circuit protection</b>   |  |
| product function short circuit protection   | Yes  |
| design of the short-circuit trip  | magnetic   |
| design of the fuse link for IT network for short-circuit protection of the main circuit |  |
| • at 240 V  | none required  |
| • at 400 V  | None required  |
| • at 500 V  | None required  |
| • at 690 V  | None required  |
| <b>Installation/ mounting/ dimensions</b>   |  |
| mounting position   | any  |
| fastening method  | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 |

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| <b>Mounting method of circuit breaker for Transformer protection, Generator protection and system protection optional standard bar mounting</b>  | Yes                  |
| <b>height</b>  | 90 mm                |
| <b>width</b>   | 45 mm                |
| <b>depth</b>   | 75 mm                |
| <b>required spacing</b>  |                      |
| <ul style="list-style-type: none"> <li>● for grounded parts at 400 V <ul style="list-style-type: none"> <li>— downwards 20 mm</li> <li>— upwards 20 mm</li> <li>— at the side 9 mm</li> </ul> </li> <li>● for live parts at 400 V <ul style="list-style-type: none"> <li>— downwards 20 mm</li> <li>— upwards 20 mm</li> <li>— at the side 9 mm</li> </ul> </li> <li>● for grounded parts at 500 V <ul style="list-style-type: none"> <li>— downwards 20 mm</li> <li>— upwards 20 mm</li> <li>— at the side 9 mm</li> </ul> </li> <li>● for live parts at 500 V <ul style="list-style-type: none"> <li>— downwards 20 mm</li> <li>— upwards 20 mm</li> <li>— at the side 9 mm</li> </ul> </li> <li>● for grounded parts at 690 V <ul style="list-style-type: none"> <li>— downwards 20 mm</li> <li>— upwards 20 mm</li> <li>— backwards 0 mm</li> <li>— at the side 9 mm</li> <li>— forwards 0 mm</li> </ul> </li> <li>● for live parts at 690 V <ul style="list-style-type: none"> <li>— downwards 20 mm</li> <li>— upwards 20 mm</li> <li>— backwards 0 mm</li> <li>— at the side 9 mm</li> <li>— forwards 0 mm</li> </ul> </li> </ul> |                      |
| <b>Connections/ Terminals</b>  |                      |
| <b>product component removable terminal for auxiliary and control circuit</b>  | No                   |
| <b>type of electrical connection</b>   |                      |
| <ul style="list-style-type: none"> <li>● for main current circuit</li> </ul>   | screw-type terminals |
| <b>arrangement of electrical connectors for main current circuit</b>   | Top and bottom       |
| <b>type of connectable conductor cross-sections</b>  |                      |
| <ul style="list-style-type: none"> <li>● for main contacts <ul style="list-style-type: none"> <li>— solid or stranded 2x (0,5 ... 1,5 mm<sup>2</sup>), 2x (0,75 ... 2,5 mm<sup>2</sup>), 2x (1 ... 4 mm<sup>2</sup>)</li> <li>— finely stranded with core end processing 2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</li> </ul> </li> </ul>  |                      |
| <b>connectable conductor cross-section for main contacts</b>   |                      |
| <ul style="list-style-type: none"> <li>● solid or stranded 0.5 ... 4 mm<sup>2</sup></li> <li>● finely stranded with core end processing 0.5 ... 2.5 mm<sup>2</sup></li> </ul>  |                      |
| <b>type of connectable conductor cross-sections</b>  |                      |
| <ul style="list-style-type: none"> <li>● for auxiliary contacts <ul style="list-style-type: none"> <li>— solid or stranded 2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</li> </ul> </li> </ul>  |                      |
| <b>AWG number as coded connectable conductor cross section for main contacts</b>   | 18 ... 14            |
| <b>tightening torque</b>   |                      |
| <ul style="list-style-type: none"> <li>● for main contacts with screw-type terminals 0.8 ... 1.2 N·m</li> <li>● for auxiliary contacts with screw-type terminals 0.8 ... 1.2 N·m</li> </ul>  |                      |
| <b>design of screwdriver shaft</b>   | Diameter 5 to 6 mm   |
| <b>size of the screwdriver tip</b>   | Pozidriv size 2      |
| <b>design of the thread of the connection screw</b>  |                      |

|   |  |
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| • for main contacts                                     | M3   |
| Electrical Safety                                       |  |
| protection class IP on the front according to IEC 60529 | IP20   |
| touch protection on the front according to IEC 60529    | finger-safe, for vertical contact from the front |
| Display   |  |
| display version for switching status                    | Rocker switch                                    |

### Approvals Certificates

|             |                          |
|-------------|--------------------------|
| Environment | General Product Approval |
|-------------|--------------------------|

[Environmental Conformations](#)



EG-Konf.

|                          |                   |                      |
|--------------------------|-------------------|----------------------|
| General Product Approval | Test Certificates | Maritime application |
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[Special Test Certificate](#)



LRS

|                      |       |         |
|----------------------|-------|---------|
| Maritime application | other | Railway |
|----------------------|-------|---------|



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[Special Test Certificate](#)

### Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RV1611-0BD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1611-0BD10>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV1611-0BD10&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1611-0BD10&lang=en)

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1611-0BD10>

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)



