## SIEMENS

## Data sheet

## 3RV1011-0HA15



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.55...0.8 A N-release 10 A Screw terminal Standard switching capacity with transverse auxiliary switch 1 NO+1 NC

| product brand name   | SIRIUS               |  |  |
|--|----------------------|--|--|
| product designation  | Circuit breaker      |  |  |
| design of the product  | For motor protection |  |  |
| product type designation   | 3RV1                 |  |  |
| General technical data   |                      |  |  |
| size of the circuit-breaker  | S00                  |  |  |
| size of contactor can be combined company-specific                                     | S00                  |  |  |
| product extension auxiliary switch   | Yes                  |  |  |
| power loss [W] for rated value of the current  |                      |  |  |
| <ul> <li>at AC in hot operating state</li> </ul>                                       | 5.5 W                |  |  |
| <ul> <li>at AC in hot operating state per pole</li> </ul>                              | 1.8 W                |  |  |
| insulation voltage with degree of pollution 3 at AC rated value                        | 690 V                |  |  |
| surge voltage resistance rated value   | 6 kV                 |  |  |
| mechanical service life (switching cycles)   |                      |  |  |
| <ul> <li>of the main contacts typical</li> </ul>                                       | 100 000              |  |  |
| <ul> <li>of auxiliary contacts typical</li> </ul>                                      | 100 000              |  |  |
| electrical endurance (switching cycles) typical  | 100 000              |  |  |
| reference code according to IEC 81346-2  | Q                    |  |  |
| Substance Prohibitance (Date)  | 01/01/2013           |  |  |
| Ambient conditions   |                      |  |  |
| installation altitude at height above sea level maximum                                | 2 000 m              |  |  |
| ambient temperature  |                      |  |  |
| <ul> <li>during operation</li> </ul>   | -20 +60 °C           |  |  |
| <ul> <li>during storage</li> </ul>   | -50 +80 °C           |  |  |
| during transport   | -50 +80 °C           |  |  |
| relative humidity during operation   | 10 95 %              |  |  |
| Main circuit   |                      |  |  |
| number of poles for main current circuit   | 3                    |  |  |
| adjustable current response value current of the<br>current-dependent overload release | 0.55 0.8 A           |  |  |
| operating voltage  |                      |  |  |
| <ul> <li>rated value</li> </ul>  | 20 690 V             |  |  |
| <ul> <li>at AC-3 rated value maximum</li> </ul>  | 690 V                |  |  |
| <ul> <li>at AC-3e rated value maximum</li> </ul>                                       | 690 V                |  |  |
| operating frequency rated value  | 50 60 Hz             |  |  |
| operational current rated value  | 0.8 A                |  |  |
| operational current  |                      |  |  |
| <ul> <li>at AC-3 at 400 V rated value</li> </ul>                                       | 0.8 A                |  |  |
| • at AC-3 at 400 v fateu value   | 0.071                |  |  |

| operating power   |   |
|---|---|
| • at AC-3   |   |
| — at 230 V rated value  | 0.1 kW  |
| — at 400 V rated value  | 0.18 kW   |
| — at 500 V rated value  | 0.3 kW  |
| — at 690 V rated value  | 0.4 kW  |
| • at AC-3e  |   |
| — at 230 V rated value  | 0.1 kW  |
| — at 400 V rated value  | 0.18 kW   |
| — at 500 V rated value  | 0.3 kW  |
| — at 690 V rated value  | 0.4 kW  |
| operating frequency   |   |
| <ul> <li>at AC-3 maximum</li> </ul>   | 15 1/h  |
| <ul> <li>at AC-3e maximum</li> </ul>  | 15 1/h  |
| Auxiliary circuit   |   |
| design of the auxiliary switch  | transverse  |
| number of NC contacts for auxiliary contacts  | 1   |
| note  | 1   |
| number of NO contacts for auxiliary contacts  | 1   |
| note  | 1   |
| number of CO contacts for auxiliary contacts  | 0   |
| operational current of auxiliary contacts at AC-15                                    |   |
| • at 24 V   | 2 A   |
| ● at 110 V  | 2 A   |
| • at 120 V  | 2 A   |
| • at 125 V  | 2 A   |
| • at 230 V  | 0.5 A   |
| operational current of auxiliary contacts at DC-13                                    |   |
| • at 24 V   | 1 A   |
| • at 60 V   | 0.15 A  |
| Protective and monitoring functions   |   |
| product function  |   |
| ground fault detection  | No  |
| phase failure detection   | Yes   |
| trip class  | CLASS 10  |
| design of the overload release  | thermal   |
| breaking capacity maximum short-circuit current (Icu)                                 | 100 14  |
| 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  |
| breaking capacity operating short-circuit current (Ics)<br>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  |
| response value current of instantaneous short-circuit trip<br>unit                    | 10 A  |
| UL/CSA ratings  |   |
| full-load current (FLA) for 3-phase AC motor  |   |
| at 480 V rated value  | 0.8 A   |
| • at 600 V rated value  | 0.8 A   |
| contact rating of auxiliary contacts according to UL                                  | C300 / R300   |
| Short-circuit protection  |   |
| product function short circuit protection   | Yes   |
| design of the short-circuit trip  | magnetic  |
| design of the fuse link   |   |
| <ul> <li>for short-circuit protection of the auxiliary switch<br/>required</li> </ul> | fuse gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A) |

| design of the fuse link for IT network for short-circuit<br>protection of the main circuit |  |  |  |  |  |
|--|--|--|--|--|--|
| • at 240 V   | none required  |  |  |  |  |
| • at 200 V   | None required  |  |  |  |  |
| • at 500 V   | gL/gG 6 A  |  |  |  |  |
| • at 690 V   | gL/gG 6 A  |  |  |  |  |
| Installation/ mounting/ dimensions   | ginge e A  |  |  |  |  |
|  | 274  |  |  |  |  |
| mounting position  | any  |  |  |  |  |
| fastening method   | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715   |  |  |  |  |
| height   | 90 mm  |  |  |  |  |
| width  | 45 mm  |  |  |  |  |
| depth  | 75 mm  |  |  |  |  |
| required spacing   |  |  |  |  |  |
| <ul> <li>for grounded parts at 400 V</li> </ul>  |  |  |  |  |  |
| — downwards  | 20 mm  |  |  |  |  |
| — upwards  | 20 mm  |  |  |  |  |
| — at the side  | 9 mm   |  |  |  |  |
| <ul> <li>for live parts at 400 V</li> </ul>  |  |  |  |  |  |
| — downwards  | 20 mm  |  |  |  |  |
| — upwards  | 20 mm  |  |  |  |  |
| — at the side  | 9 mm   |  |  |  |  |
| <ul> <li>for grounded parts at 500 V</li> </ul>  |  |  |  |  |  |
| — downwards  | 20 mm  |  |  |  |  |
| — upwards  | 20 mm  |  |  |  |  |
| — at the side  | 9 mm   |  |  |  |  |
| <ul> <li>for live parts at 500 V</li> </ul>  |  |  |  |  |  |
| — downwards  | 20 mm  |  |  |  |  |
| — upwards  | 20 mm  |  |  |  |  |
| — at the side  | 9 mm   |  |  |  |  |
| <ul> <li>for grounded parts at 690 V</li> </ul>  |  |  |  |  |  |
| — downwards  | 20 mm  |  |  |  |  |
| — upwards  | 20 mm  |  |  |  |  |
| — backwards  | 0 mm   |  |  |  |  |
| — at the side  | 9 mm   |  |  |  |  |
| — forwards   | 0 mm   |  |  |  |  |
| <ul> <li>for live parts at 690 V</li> </ul>  |  |  |  |  |  |
| — downwards  | 20 mm  |  |  |  |  |
| — upwards  | 20 mm  |  |  |  |  |
| — backwards  | 0 mm   |  |  |  |  |
| — at the side  | 9 mm   |  |  |  |  |
| — forwards   | 0 mm   |  |  |  |  |
| Connections/ Terminals   |  |  |  |  |  |
| type of electrical connection  |  |  |  |  |  |
| for main current circuit   | screw-type terminals   |  |  |  |  |
| <ul> <li>for auxiliary and control circuit</li> </ul>                                      | screw-type terminals   |  |  |  |  |
| arrangement of electrical connectors for main current                                      | Top and bottom   |  |  |  |  |
| circuit  |  |  |  |  |  |
| type of connectable conductor cross-sections   |  |  |  |  |  |
| for main contacts  |  |  |  |  |  |
| — 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> ) |  |  |  |  |
| — finely stranded with core end processing   | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  |  |  |  |  |
| type of connectable conductor cross-sections   |  |  |  |  |  |
| for auxiliary contacts   | $\Omega_{\rm M} = (0.5 \pm 0.5 \pm 0.5)$   |  |  |  |  |
| solid or stranded  | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  |  |  |  |  |
| tightening torque  | 0.9 1.2 N m  |  |  |  |  |
| for main contacts with screw-type terminals  | 0.8 1.2 N·m  |  |  |  |  |
| for auxiliary contacts with screw-type terminals   | 0.8 1.2 N·m  |  |  |  |  |
| size of the screwdriver tip  | Pozidriv size 2  |  |  |  |  |
| design of the thread of the connection screw   | MO   |  |  |  |  |
| <ul> <li>for main contacts</li> </ul>  | M3   |  |  |  |  |

| <ul> <li>of the auxiliary</li> </ul>  | and control contacts   |                    | M3               |   |   |                                     |  |
|---|--|--------------------|------------------|---|---|-------------------------------------|--|
| Safety related data   |  |                    |                  |   |   |                                     |  |
| B10 value   |  |                    |                  |   |   |                                     |  |
| with high dema  | nd rate according to SN  | 31920              | 5 000            |   |   |                                     |  |
| proportion of dange   | rous failures  |                    |                  |   |   |                                     |  |
| <ul> <li>with low demand rate according to SN 31920</li> </ul>  |  |                    | 50 %             |   |   |                                     |  |
| <ul> <li>with high dema</li> </ul>  | <ul> <li>with high demand rate according to SN 31920</li> </ul>  |                    |                  | 50 %  |   |                                     |  |
| failure rate [FIT]  | failure rate [FIT]   |                    |                  |   |   |                                     |  |
|   | <ul> <li>with low demand rate according to SN 31920</li> </ul>   |                    |                  | 50 FIT  |   |                                     |  |
|   | on the front according   | to IEC             | IP20             |   |   |                                     |  |
|   | 60529  |                    |                  | finger-safe for vertical contact from the front |   |                                     |  |
|   | touch protection on the front according to IEC 60529       finger-safe, for vertical contact from the front         display version for switching status       Rocker switch |                    |                  |   |   |                                     |  |
| Certificates/ approval  | 0  |                    | Rocker Switch    |   |   |                                     |  |
| General Product Ap  |  |                    |                  |   |   | For use in hazard-<br>ous locations |  |
|   |  |                    |                  |   |   |                                     |  |
| (SP)<br>Can   |  | <u>Confirmatio</u> | <u></u>          | Ĩ,  | EHC                                     | IECEx                               |  |
| For use in hazard-<br>ous locations   | Declaration of Confo   | ormity             | Test Ce          | ertificates                                     |   | Marine / Shipping                   |  |
| K<br>ATEX   | CE<br>EG-Konf.   | UK<br>CA           | <u>Special 1</u> | <u>est Certific-</u><br>ate                     | Type Test Certific-<br>ates/Test Report | ABS                                 |  |
| Marine / Shipping   |  |                    |                  |   |   |                                     |  |
| B U R E A U<br>VERITAS  | Lloyds<br>Register<br>urs  | PRS                |                  | RINA  | RMRS                                    |                                     |  |
| other   |  |                    | Railway          | /   |   |                                     |  |
| <u>Confirmation</u>   | <u>Miscellaneous</u>   | DE                 |                  | Test Certific-<br>ate                           |   |                                     |  |
| Further information   |  |                    |                  |   |   |                                     |  |
| Information- and Downloadcenter (Catalogs, Brochures,)  |  |                    |                  |   |   |                                     |  |
| https://www.siemens.com/ic10<br>Industry Mall (Online ordering system)<br>https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV1011-0HA15   |  |                    |                  |   |   |                                     |  |
| Cax online generator<br>http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-0HA15<br>Service&Support (Manuals, Certificates, Characteristics, FAQs,)<br>https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0HA15<br>Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) |  |                    |                  |   |   |                                     |  |
| http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-0HA15⟨=en<br>Characteristic: Tripping characteristics, I <sup>2</sup> t, Let-through current  |  |                    |                  |   |   |                                     |  |
| https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0HA15/char<br>Further characteristics (e.g. electrical endurance, switching frequency)<br>http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-0HA15&objecttype=14&gridview=view1  |  |                    |                  |   |   |                                     |  |
|   |  |                    |                  |   |   |                                     |  |

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