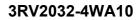
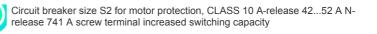
## **SIEMENS**

## Data sheet



Siemens EcoTech



| product brand name  | SIRIUS               |
|---|----------------------|
| product designation   | Circuit breaker      |
| design of the product   | For motor protection |
| product type designation  | 3RV2                 |
| General technical data  |                      |
| size of the circuit-breaker   | \$2                  |
| size of contactor can be combined company-specific                                      | S2                   |
| product extension auxiliary switch  | Yes                  |
| power loss [W] for rated value of the current   |                      |
| <ul> <li>at AC in hot operating state</li> </ul>  | 24.5 W               |
| <ul> <li>at AC in hot operating state per pole</li> </ul>                               | 8.2 W                |
| insulation voltage with degree of pollution 3 at AC rated value                         | 690 V                |
| surge voltage resistance rated value  | 6 kV                 |
| shock resistance according to IEC 60068-2-27  | 25g / 11 ms Sinus    |
| mechanical service life (operating cycles)  |                      |
| <ul> <li>of the main contacts typical</li> </ul>  | 50 000               |
| <ul> <li>of auxiliary contacts typical</li> </ul>                                       | 50 000               |
| electrical endurance (operating cycles) typical   | 50 000               |
| reference code according to IEC 81346-2   | Q                    |
| Substance Prohibitance (Date)   | 10/15/2014           |
| SVHC substance name   | Lead - 7439-92-1     |
| 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 current-<br>dependent overload release | 42 52 A              |
| operating voltage   |                      |
| rated value   | 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                                 | 52 A   |
|---|--|
| operational current   |  |
| <ul> <li>at AC-3 at 400 V rated value</li> </ul>                | 52 A   |
| <ul> <li>at AC-3e at 400 V rated value</li> </ul>               | 52 A   |
| operating power   |  |
| • at AC-3   |  |
| — at 230 V rated value  | 15 kW  |
| — at 400 V rated value  | 22 kW  |
| — at 500 V rated value  | 30 kW  |
| — at 690 V rated value  | 45 kW  |
| • at AC-3e  |  |
| — at 230 V rated value  | 15 kW  |
| — at 400 V rated value  | 22 kW  |
| — at 500 V rated value  | 30 kW  |
| — at 690 V rated value  | 45 kW  |
| operating frequency   |  |
| • at AC-3 maximum   | 15 1/h   |
| • at AC-3e maximum  | 15 1/h   |
| Protective and monitoring functions                             |  |
| product function  |  |
| ground fault detection  | No   |
| -   | Yes  |
| phase failure detection   | CLASS 10   |
| trip class  |  |
| design of the overload release                                  | thermal  |
| maximum short-circuit current breaking capacity (Icu)           | 400 1 4  |
| • 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                                    | 10 kA  |
| at AC at 690 V rated value                                      | 6 kA   |
| operating short-circuit current breaking capacity (Ics) at AC   |  |
| at 240 V rated value  | 100 kA   |
| <ul> <li>at 400 V rated value</li> </ul>                        | 50 kA  |
| <ul> <li>at 500 V rated value</li> </ul>                        | 5 kA   |
| <ul> <li>at 690 V rated value</li> </ul>                        | 4 kA   |
| response value current of instantaneous short-circuit trip unit | 741 A  |
| UL/CSA ratings  |  |
| full-load current (FLA) for 3-phase AC motor                    |  |
| <ul> <li>at 480 V rated value</li> </ul>                        | 52 A   |
| • at 600 V rated value  | 52 A   |
| yielded mechanical performance [hp]                             |  |
| <ul> <li>for single-phase AC motor</li> </ul>                   |  |
| — at 110/120 V rated value                                      | 5 hp   |
| — at 230 V rated value  | 10 hp  |
| • for 3-phase AC motor  |  |
| — at 200/208 V rated value                                      | 15 hp  |
| — at 220/230 V rated value                                      | 20 hp  |
| — at 460/480 V rated value                                      | 40 hp  |
| — at 575/600 V rated value                                      | 50 hp  |
| Short-circuit protection  |  |
| 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  | 160  |
| • at 500 V  | 125  |
| • at 690 V  | 100  |
| Installation/ mounting/ dimensions                              |  |
| mounting position   | any  |
| fastening method  | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 |
| height  | 140 mm   |
|   |  |

| width   | 55 mm                        |
|---|------------------------------|
| depth   | 149 mm                       |
| required spacing  |                              |
| with side-by-side mounting at the side                          | 0 mm                         |
| <ul> <li>for grounded parts at 400 V</li> </ul>                 |                              |
| — downwards   | 50 mm                        |
| — upwards   | 50 mm                        |
| — at the side   | 10 mm                        |
| • for live parts at 400 V                                       |                              |
| — downwards   | 50 mm                        |
| — upwards   | 50 mm                        |
| — at the side   | 10 mm                        |
| <ul> <li>for grounded parts at 500 V</li> </ul>                 |                              |
| — downwards   | 50 mm                        |
| — upwards   | 50 mm                        |
| — at the side   | 10 mm                        |
| • for live parts at 500 V                                       |                              |
| — downwards   | 50 mm                        |
| — upwards   | 50 mm                        |
| — at the side   | 10 mm                        |
| <ul> <li>for grounded parts at 690 V</li> </ul>                 |                              |
| — downwards   | 50 mm                        |
| — upwards   | 50 mm                        |
| — at the side   | 10 mm                        |
| • for live parts at 690 V                                       |                              |
| — downwards   | 50 mm                        |
| — upwards   | 50 mm                        |
| — at the side   | 10 mm                        |
| Connections/ Terminals  |                              |
| type of electrical connection                                   |                              |
| for main current circuit  | screw-type terminals         |
| arrangement of electrical connectors for main current circuit   | Top and bottom               |
| type of connectable conductor cross-sections                    |                              |
| for main contacts   |                              |
| — solid or stranded   | 2x (1 35 mm²), 1x (1 50 mm²) |
| <ul> <li>finely stranded with core end processing</li> </ul>    | 2x (1 25 mm²), 1x (1 35 mm²) |
| <ul> <li>for AWG cables for main contacts</li> </ul>            | 2x (18 2), 1x (18 1)         |
| tightening torque   |                              |
| <ul> <li>for main contacts with screw-type terminals</li> </ul> | 3 4.5 N·m                    |
| design of screwdriver shaft                                     | Diameter 5 to 6 mm           |
| size of the screwdriver tip                                     | Pozidriv size 2              |
| design of the thread of the connection screw                    |                              |
| <ul> <li>for main contacts</li> </ul>                           | M6                           |
| Safety related data   |                              |
| product function suitable for safety function                   | Yes                          |
| suitability for use   |                              |
| <ul> <li>safety-related switching on</li> </ul>                 | No                           |
| <ul> <li>safety-related switching OFF</li> </ul>                | Yes                          |
| service life maximum  | 10 a                         |
| test wear-related service life necessary                        | Yes                          |
| proportion of dangerous failures                                |                              |
| <ul> <li>with low demand rate according to SN 31920</li> </ul>  | 40 %                         |
| <ul> <li>with high demand rate according to SN 31920</li> </ul> | 50 %                         |
| B10 value with high demand rate according to SN 31920           | 5 000                        |
| failure rate [FIT] with low demand rate according to SN 31920   | 50 FIT                       |
| ISO 13849   |                              |
| device type according to ISO 13849-1                            | 3                            |
| overdimensioning according to ISO 13849-2 necessary             | Yes                          |
| IEC 61508   |                              |
|   |                              |

|  |   |                               | •   |  |                     |  |
|--|---|-------------------------------|---|--|---------------------|--|
| safety device type acc   | ording to IEC 61508-2                                       | Туре                          | A   |  |                     |  |
| <ul> <li>T1 value</li> <li>for proof test interval or service life according to IEC 61508</li> </ul> |   | ding to IEC 10 a              | 10 a  |  |                     |  |
| Electrical Safety  |   |                               |   |  |                     |  |
| protection class IP on   | the front according to                                      | IEC 60529 IP20                |   |  |                     |  |
|  |   |                               | r-safe, for vertical contact                | from the front                                 |                     |  |
| Display  |   |                               |   |  |                     |  |
| display version for switching status   |   |                               | lle   |  |                     |  |
| Approvals Certificates   |   |                               |   |  |                     |  |
| General Product Appr   | oval  |                               |   |  |                     |  |
| CE<br>EG-Konf.   | UK<br>CA  | <u>Confirmation</u>           |   | (UL)   | KC                  |  |
| General Product Ap-<br>proval  | For use in hazardou   | s locations                   | Test Certificates                           |  | Marine / Shipping   |  |
| EHC  | KEx<br>ATEX   | IECEx<br>IECEx                | <u>Special Test Certific-</u><br><u>ate</u> | <u>Type Test Certific-</u><br>ates/Test Report | ABS                 |  |
| Marine / Shipping  |   |                               |   |  | other               |  |
| BUREAU<br>VERITAS  |   | Llovd's<br>Register<br>us     | PRS   | RINA   | <u>Confirmation</u> |  |
| other  |   | Railway                       |   | Environment                                    |                     |  |
| Miscellaneous  |   | Special Test Certific-<br>ate | <u>Confirmation</u>                         | EPD  | Siemens<br>EcoTech  |  |
| Environment  |   |                               |   |  |                     |  |
| Environmental Con-<br>firmations   |   |                               |   |  |                     |  |
| urther information   | kaning  |                               |   |  |                     |  |
| Information on the packaging<br>https://support.industry.siemens.com/cs/ww/en/view/109813875         |   |                               |   |  |                     |  |
| Information- and Down<br>https://www.siemens.co<br>Industry Mall (Online of                          | nloadcenter (Catalogs,<br><u>m/ic10</u><br>ordering system) | Brochures,)                   | 222 404440                                  |  |                     |  |
| https://mail.industry.sien   | nens.com/maii/en/en/Ca                                      | atalog/product?mlfb=3RV20     | <u>132-499A IU</u>                          |  |                     |  |

Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2032-4WA10

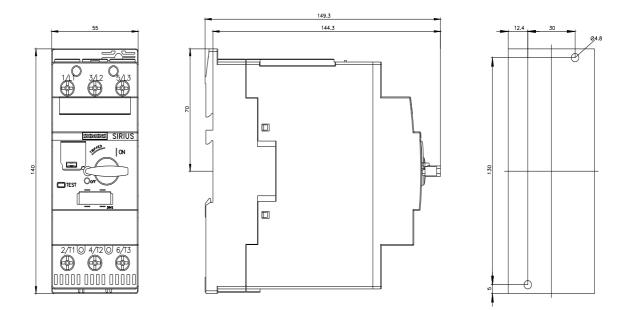
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
- https://support.industry.siemens.com/cs/ww/en/ps/3RV2032-4WA10

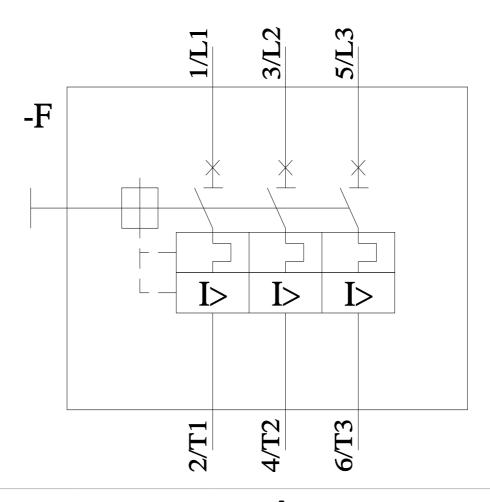
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2032-4WA10&lang=en

- Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RV2032-4WA10/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=S RV2032-4WA10&objecttype=14&gridview=view1





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