

Siemens  
EcoTech



converter control voltage 24 V AC/DC for semiconductor relay/contactors



|                                                                        |                                                                                                                                                          |
|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| product brand name                                                     | SIRIUS                                                                                                                                                   |
| product designation                                                    | converter                                                                                                                                                |
| product type designation                                               | 3RF39                                                                                                                                                    |
| General technical data                                                 |                                                                                                                                                          |
| product function                                                       | for 3RF31, 3RF32, 3RF33, and 3RF34...-A semiconductor relays / contactors                                                                                |
| type of calculation of power loss current-dependent                    | linear                                                                                                                                                   |
| degree of pollution                                                    | 3                                                                                                                                                        |
| protection class IP                                                    | IP20                                                                                                                                                     |
| protection class IP on the front according to IEC 60529                | IP20                                                                                                                                                     |
| shock resistance according to IEC 60068-2-27                           | 15 g / 11 ms                                                                                                                                             |
| vibration resistance according to IEC 60068-2-6                        | 2 g                                                                                                                                                      |
| reference code according to IEC 81346-2                                | T                                                                                                                                                        |
| Substance Prohibitance (day/month/year)                                | 03/07/2024                                                                                                                                               |
| SVHC substance name                                                    | Lead monoxide (lead oxide) CAS-No. 1317-36-8<br>2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one CAS-No. 71868-10-5<br>Melamine CAS-No. 108-78-1 |
| Net Weight                                                             | 0.045 kg                                                                                                                                                 |
| Main circuit                                                           |                                                                                                                                                          |
| number of NO contacts for main contacts                                | 0                                                                                                                                                        |
| number of NC contacts for main contacts                                | 0                                                                                                                                                        |
| type of voltage of the operating voltage                               | AC                                                                                                                                                       |
| relative symmetrical tolerance of the operating frequency              | 10 %                                                                                                                                                     |
| Control circuit/ Control                                               |                                                                                                                                                          |
| type of voltage                                                        | AC/DC                                                                                                                                                    |
| control supply voltage at AC                                           |                                                                                                                                                          |
| • at 50 Hz rated value                                                 | 20.5 ... 26.5 V                                                                                                                                          |
| • at 60 Hz rated value                                                 | 20.5 ... 26.5 V                                                                                                                                          |
| control supply voltage at DC rated value                               | 18 ... 30 V                                                                                                                                              |
| supply voltage frequency for auxiliary and control circuit rated value | 50 ... 60 Hz                                                                                                                                             |
| symmetrical line frequency tolerance                                   | 5 Hz                                                                                                                                                     |
| control current at AC rated value                                      | 25 mA                                                                                                                                                    |
| control current at DC rated value                                      | 25 mA                                                                                                                                                    |
| Auxiliary circuit                                                      |                                                                                                                                                          |
| number of NC contacts for auxiliary contacts                           | 0                                                                                                                                                        |
| number of NO contacts for auxiliary contacts                           | 0                                                                                                                                                        |

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| number of CO contacts for auxiliary contacts                                                                                                                                                                                                                                                                          | 0                                                                                                                                                                                                                                |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                  |
| fastening method side-by-side mounting                                                                                                                                                                                                                                                                                | Yes                                                                                                                                                                                                                              |
| <b>fastening method</b>                                                                                                                                                                                                                                                                                               | clip-on                                                                                                                                                                                                                          |
| <b>height</b>                                                                                                                                                                                                                                                                                                         | 83.5 mm                                                                                                                                                                                                                          |
| <b>width</b>                                                                                                                                                                                                                                                                                                          | 22.5 mm                                                                                                                                                                                                                          |
| <b>depth</b>                                                                                                                                                                                                                                                                                                          | 38 mm                                                                                                                                                                                                                            |
| <b>Connections/ Terminals</b>                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                  |
| type of electrical connection for auxiliary and control circuit                                                                                                                                                                                                                                                       | screw-type terminals                                                                                                                                                                                                             |
| <b>type of connectable conductor cross-sections</b>                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>for auxiliary and control contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> </ul> </li> <li>for AWG cables for auxiliary and control contacts</li> </ul> | 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1 mm <sup>2</sup> )<br>1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1 mm <sup>2</sup> )<br>1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1 mm <sup>2</sup> )<br>1x (20 ... 12) |
| tightening torque for auxiliary and control contacts with screw-type terminals                                                                                                                                                                                                                                        | 0.5 ... 0.6 N·m                                                                                                                                                                                                                  |
| tightening torque [lbf·in] for auxiliary and control contacts with screw-type terminals                                                                                                                                                                                                                               | 4.5 ... 5.3 lbf·in                                                                                                                                                                                                               |
| design of the thread of the connection screw of the auxiliary and control contacts                                                                                                                                                                                                                                    | M3                                                                                                                                                                                                                               |
| stripped length of the cable for auxiliary and control contacts                                                                                                                                                                                                                                                       | 7 mm                                                                                                                                                                                                                             |
| <b>Electrical Safety</b>                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |
| <b>touch protection on the front according to IEC 60529</b>                                                                                                                                                                                                                                                           | finger-safe, for vertical contact from the front                                                                                                                                                                                 |
| <b>Ambient conditions</b>                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                  |
| installation altitude at height above sea level maximum                                                                                                                                                                                                                                                               | 1 000 m                                                                                                                                                                                                                          |
| <b>ambient temperature</b>                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> </ul>                                                                                                                                                                                                                            | -25 ... +60 °C<br>-55 ... +80 °C                                                                                                                                                                                                 |
| <b>Electromagnetic compatibility</b>                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                  |
| <b>conducted interference</b>                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>due to burst according to IEC 61000-4-4</li> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> <li>due to high-frequency radiation according to IEC 61000-4-6</li> </ul>                   | 2 kV / 5 kHz, behavior criterion 2<br>2 kV, behavior criterion 2<br>1 kV, behavior criterion 2<br>140 dBuV in the frequency range 0.15 ... 80 MHz, behavior criterion 1                                                          |
| <b>electrostatic discharge according to IEC 61000-4-2</b>                                                                                                                                                                                                                                                             | 4 kV contact discharging / 8 kV air discharging, behavior criterion 2                                                                                                                                                            |
| <b>conducted HF interference emissions according to CISPR11</b>                                                                                                                                                                                                                                                       | Class A for industrial environment                                                                                                                                                                                               |
| <b>field-bound HF interference emission according to CISPR11</b>                                                                                                                                                                                                                                                      | Class B for the domestic, business and commercial environments                                                                                                                                                                   |
| <b>Approvals Certificates</b>                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                  |
| <b>Environment</b>                                                                                                                                                                                                                                                                                                    | <b>General Product Approval</b>                                                                                                                                                                                                  |

[Environmental Confirmations](#)



|     |                                                           |
|-----|-----------------------------------------------------------|
| EMV | other                                                     |
|     | <a href="#">Confirmation</a> <a href="#">Confirmation</a> |

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| <b>Further information</b>                                                                                                                                                                                                                                                                                                                                                      |
| <b>Information on the packaging</b><br><a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a><br><b>Information for data generation and storage</b><br><a href="https://support.industry.siemens.com/cs/ww/en/view/109995012">https://support.industry.siemens.com/cs/ww/en/view/109995012</a> |

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=3RF3900-0EA18>

Cax online generator

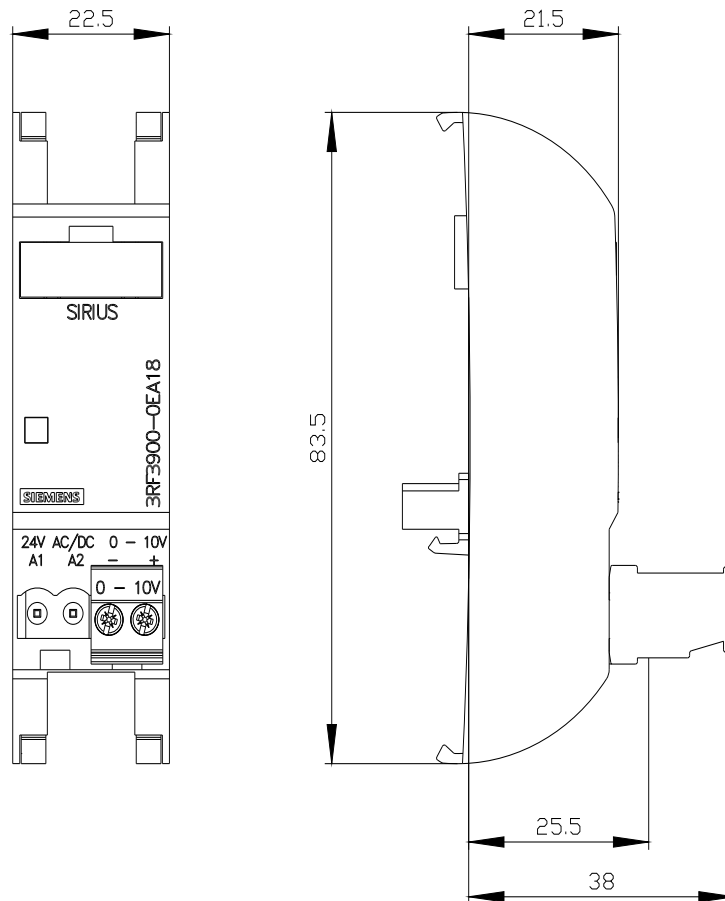
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF3900-0EA18>

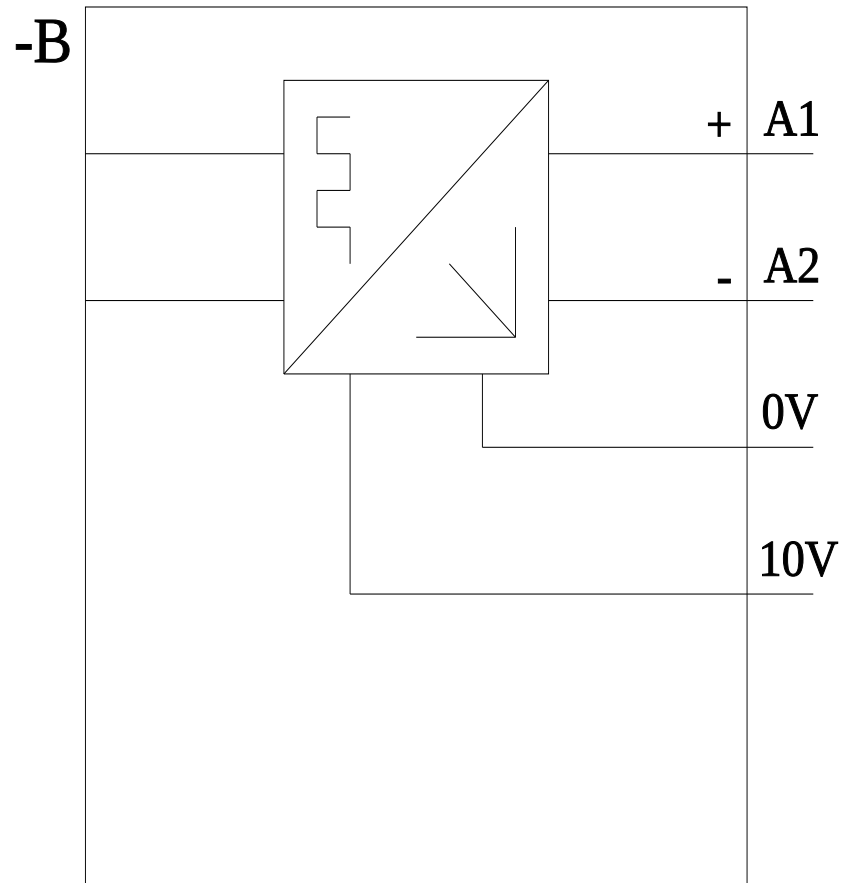
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RF3900-0EA18>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RF3900-0EA18&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF3900-0EA18&lang=en)





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