



Converter Control supply voltage 24 V AC/DC for semiconductor relay / contactor

|  |  |
|--|--|
| product brand name   | SIRIUS   |
| product designation  | converter                                      |
| <b>General technical data</b>  |  |
| product function   | solid-state relay / solid-state contactor 3RF2 |
| degree of pollution  | 3  |
| shock resistance acc. to IEC 60068-2-27                                | 15g / 11 ms                                    |
| vibration resistance acc. to IEC 60068-2-6                             | 2g   |
| reference code acc. to IEC 81346-2                                     | T  |
| <b>Main circuit</b>  |  |
| number of poles for main current circuit                               | 0  |
| number of NO contacts for main contacts                                | 0  |
| number of NC contacts for main contacts                                | 0  |
| type of voltage  | AC/DC  |
| operating frequency rated value  | 50 ... 60 Hz                                   |
| relative symmetrical tolerance of the operating frequency              | 10 %   |
| derating temperature   | 40 °C  |
| <b>Control circuit/ Control</b>  |  |
| type of voltage  | AC/DC  |
| • control supply voltage at AC at 50 Hz rated value                    | 20.5 ... 26.5 V                                |
| • control supply voltage at AC 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  |
| <b>Auxiliary circuit</b>   |  |
| 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>Installation/ mounting/ dimensions</b>                              |  |
| fastening method   | clip-on  |
| • side-by-side mounting  | Yes  |
| height   | 83.5 mm  |
| width  | 22.5 mm  |
| depth  | 38 mm  |

| Connections/ Terminals  |  |                                  |
|---|--|----------------------------------|
| <b>type of electrical connection</b> <ul style="list-style-type: none"><li>• for auxiliary and control circuit</li></ul>  | 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>• at AWG cables for auxiliary and control contacts</li></ul> | 1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.0 mm²)<br>1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.0 mm²)<br>1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.0 mm²)<br>1x (AWG 20 ... 12)             |                                  |
| <ul style="list-style-type: none"><li>• tightening torque for auxiliary and control contacts with screw-type terminals</li></ul>  | 0.5 ... 0.6 N·m  |                                  |
| <ul style="list-style-type: none"><li>• tightening torque [lbf·in] for auxiliary and control contacts with screw-type terminals</li></ul>   | 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   |                                  |
| UL/CSA ratings  |  |                                  |
| Safety related data   |  |                                  |
| <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   |                                  |
| Ambient conditions  |  |                                  |
| installation altitude at height above sea level maximum   | 1 000 m  |                                  |
| <ul style="list-style-type: none"><li>• ambient temperature during operation</li><li>• ambient temperature during storage</li></ul>   | -25 ... +60 °C<br>-55 ... +80 °C   |                                  |
| Electromagnetic compatibility   |  |                                  |
| <b>conducted interference</b> <ul style="list-style-type: none"><li>• due to burst acc. to IEC 61000-4-4</li><li>• due to conductor-earth surge acc. to IEC 61000-4-5</li><li>• due to conductor-conductor surge acc. to IEC 61000-4-5</li><li>• due to high-frequency radiation acc. 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><br>140 dBuV in the frequency range 0.15 ... 80 MHz, behavior criterion 1 |                                  |
| <b>electrostatic discharge acc. to IEC 61000-4-2</b>  | 4 kV contact discharging / 8 kV air discharging, behavior criterion 2  |                                  |
| <b>conducted HF interference emissions acc. to CISPR11</b>  | Class A for industrial environment   |                                  |
| <b>field-bound HF interference emission acc. to CISPR11</b>   | Class B for the domestic, business and commercial environments   |                                  |
| Short-circuit protection, design of the fuse link   |  |                                  |
| Certificates/ approvals   |  |                                  |
| <b>General Product Approval</b>   | <b>EMC</b>   | <b>Declaration of Conformity</b> |



[Miscellaneous](#)



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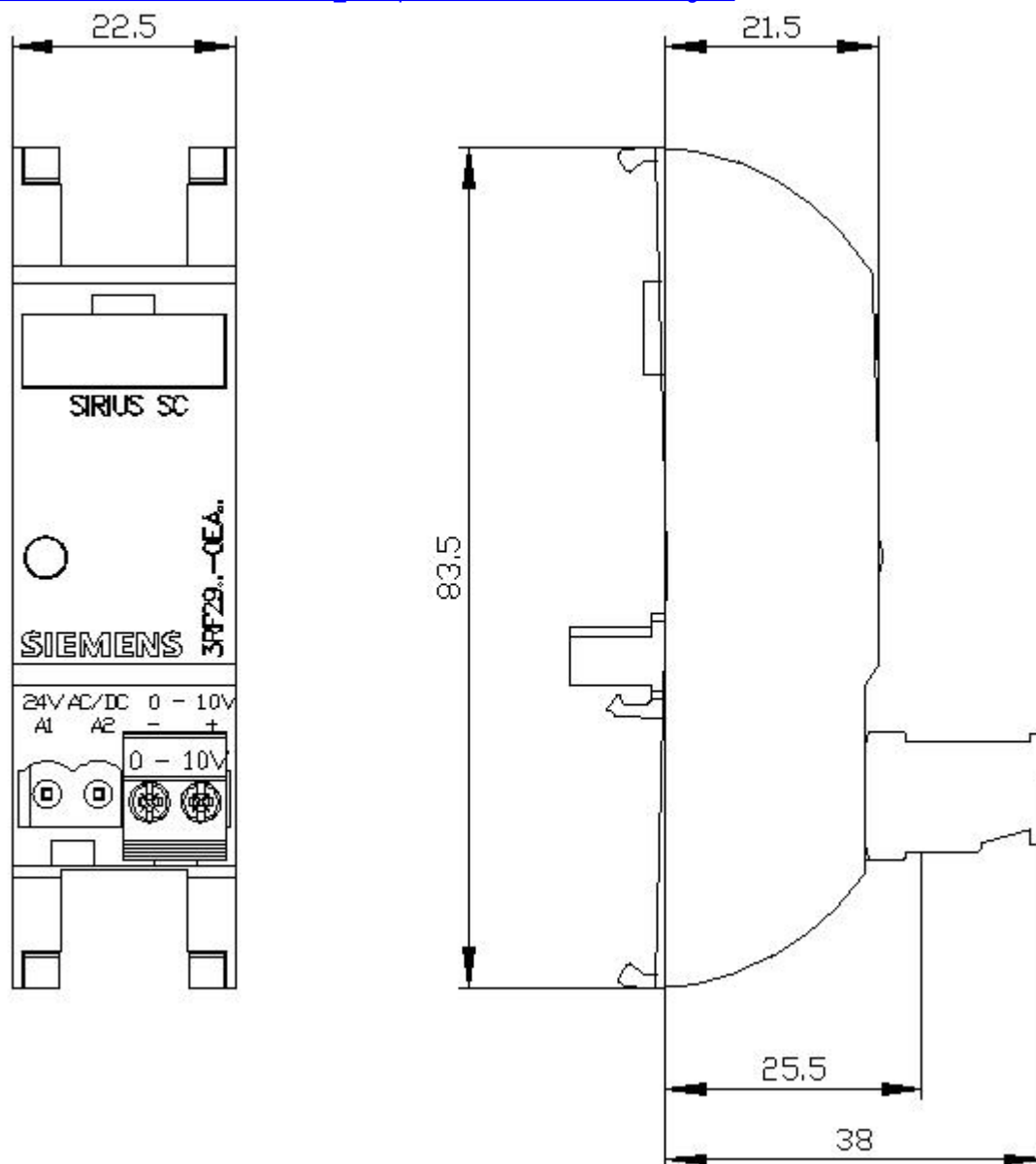
#### Further information

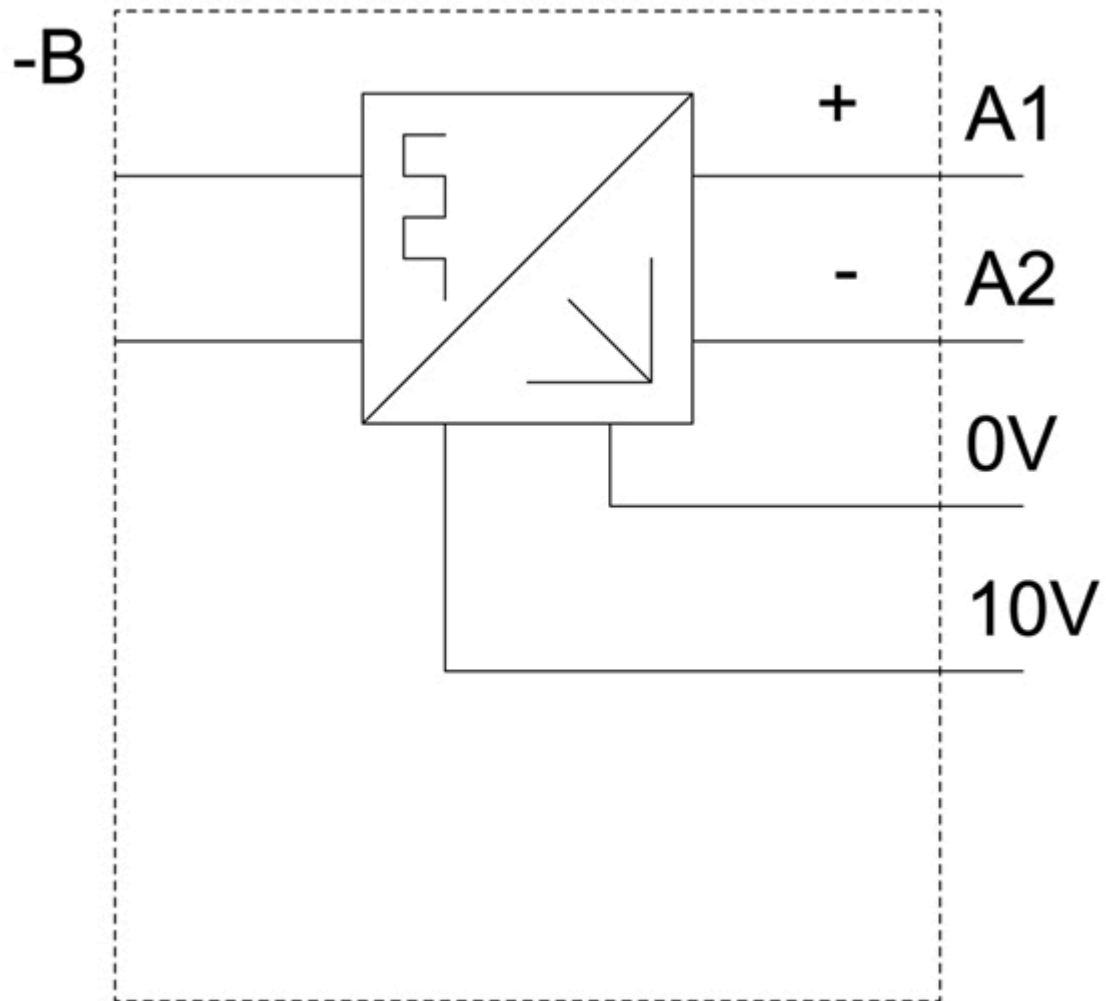
Information- and Downloadcenter (Catalogs, Brochures,...)

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mifb=3RF2900-0EA18>





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