



Separation amplifier 24 V AC/DC, 3-way separation input: 0-60 mV, 0-100 mV 0-300 mV, 0-500 mV, 0-1 V 0-2 V, 0-5 V, 0-10 mA, 0-20 V 2-10 V, 0-5 mA, 0-10 mA 0-20mA, 4-20 mA, +-5 mA, +-20 mA output: 0 - 10 V, 0/4 - 20 mA screw terminal

|   |                                  |
|---|----------------------------------|
| <b>product brand name</b>   | SIRIUS                           |
| <b>product category</b>   | Signal converter                 |
| <b>product designation</b>  | universal converter              |
| <b>design of the product</b>  | active, switchable               |
| <b>product type designation</b>   | 3RS70                            |
| <b>General technical data</b>   |                                  |
| <b>display version LED</b>  | Yes                              |
| <b>number of channels</b>   | 1                                |
| <b>consumed active power</b>  | 0.5 W                            |
| insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value | 50 V                             |
| <b>surge voltage resistance rated value</b>   | 4 000 V                          |
| <b>protection class IP</b>  | IP20                             |
| shock resistance according to IEC 60068-2-27  | sinusoidal half-wave 15g / 11 ms |
| vibration resistance according to IEC 60068-2-6   | 6 ... 150 Hz: 2 g                |
| <b>reference code according to IEC 81346-2</b>  | T                                |
| <b>Substance Prohibitance (Date)</b>  | 03/25/2015                       |
| <b>Supply voltage</b>   |                                  |
| <b>supply voltage at AC</b>   |                                  |
| • at 50 Hz rated value  | 24 V                             |
| • at 60 Hz rated value  | 24 V                             |
| <b>supply voltage at DC rated value</b>   | 24 V                             |
| supply voltage frequency rated value  | 60 ... 50 Hz                     |
| <b>operating range factor supply voltage rated value</b>  |                                  |
| • at AC at 50 Hz  | 0.8 ... 1.1                      |
| • at AC at 60 Hz  | 0.8 ... 1.1                      |
| • at DC   | 0.8 ... 1.1                      |
| <b>Precision</b>  |                                  |
| <b>relative metering precision</b>  | 0.1 %                            |
| <b>relative linearity deviation</b>   | 0.05 %                           |
| <b>temperature drift per °C</b>   | 0.015 %/°C                       |
| <b>voltage ripple maximum</b>   | 20 mV                            |
| <b>limit frequency</b>  | 30 Hz                            |
| <b>settling time for 1 % deviation</b>  | 17 ms                            |
| <b>rise time</b>  | 6 ms                             |
| <b>Main circuit</b>   |                                  |
| <b>type of voltage</b>  | AC/DC                            |
| <b>Inputs/ Outputs</b>  |                                  |
| <b>input voltage</b>  | 30 V                             |

|  |  |
|--|--|
| <b>property of the output short-circuit proof</b>              | Yes  |
| <b>type of signal at input</b>                                 | 0 ... 60 mV, 0 ... 100 mV, 0 ... 300 mV, 0 ... 500 mV, 0 ... 1 V, 0 ... 2 V, 0 ... 5 V, 0 ... 10 V, 0 ... 20 V, 2 ... 10 V, 0 ... 5 mA, 0 ... 10 mA, 0 ... 20 mA, 4 ... 20 mA, +/-5 mA, +/-20 mA |
| <b>type of signal at output</b>                                | 0 ... 10 V, 0 ... 20 mA, 4 ... 20 mA   |
| <b>input impedance of current input maximum</b>                | 100 Ω  |
| <b>input impedance of voltage input minimum</b>                | 330 kΩ   |
| <b>output load</b>   |  |
| • at voltage output minimum                                    | 2 kΩ   |
| • at the current output maximum                                | 500 Ω  |
| <b>Electromagnetic compatibility</b>                           |  |
| EMC emitted interference according to IEC 60947-1              | Environment B  |
| EMC immunity according to IEC 60947-1                          | corresponds to degree of severity 3  |
| <b>conducted interference</b>                                  |  |
| • due to burst according to IEC 61000-4-4                      | 1 kV 5/50 ns   |
| • due to conductor-conductor surge according to IEC 61000-4-5  | 1 kV   |
| <b>field-based interference according to IEC 61000-4-3</b>     | 10 V/m   |
| <b>electrostatic discharge according to IEC 61000-4-2</b>      | 6 kV contact discharge / 8 kV air discharge  |
| <b>Galvanic isolation</b>                                      |  |
| <b>design of the electrical isolation</b>                      | 3 paths  |
| <b>galvanic isolation</b>                                      |  |
| • between input and output                                     | Yes  |
| • between the outputs  | No   |
| • between the inputs   | No   |
| • between the voltage supply and other circuits                | Yes  |
| <b>Connections/ Terminals</b>                                  |  |
| <b>type of electrical connection</b>                           | screw-type terminals   |
| <b>type of connectable conductor cross-sections</b>            |  |
| • solid  | 1x (0.25 ... 2.5 mm <sup>2</sup> )   |
| • finely stranded with core end processing                     | 1x (0.25 ... 1.5 mm <sup>2</sup> )   |
| • at AWG cables solid  | 1 x (20 ... 14)  |
| <b>connectable conductor cross-section</b>                     |  |
| • solid  | 0.25 ... 2.5 mm <sup>2</sup>   |
| • finely stranded with core end processing                     | 0.25 ... 1.5 mm <sup>2</sup>   |
| <b>AWG number as coded connectable conductor cross section</b> |  |
| • solid  | 20 ... 14  |
| tightening torque with screw-type terminals                    | 0.5 ... 0.6 N·m  |
| <b>Installation/ mounting/ dimensions</b>                      |  |
| <b>mounting position</b>                                       | any  |
| <b>fastening method</b>  | snap-on mounting   |
| <b>height</b>  | 93 mm  |
| <b>width</b>   | 17.5 mm  |
| <b>depth</b>   | 72.5 mm  |
| <b>required spacing</b>  |  |
| • with side-by-side mounting                                   |  |
| — forwards   | 0 mm   |
| — backwards  | 0 mm   |
| — upwards  | 0 mm   |
| — downwards  | 0 mm   |
| — at the side  | 0 mm   |
| • for grounded parts   |  |
| — forwards   | 0 mm   |
| — backwards  | 0 mm   |
| — upwards  | 0 mm   |
| — at the side  | 0 mm   |
| — downwards  | 0 mm   |
| • for live parts   |  |
| — forwards   | 0 mm   |

|               |      |
|---------------|------|
| — backwards   | 0 mm |
| — upwards     | 0 mm |
| — downwards   | 0 mm |
| — at the side | 0 mm |

#### Ambient conditions

|   |                |
|---|----------------|
| installation altitude at height above sea level maximum | 2 000 m        |
| <b>ambient temperature</b>                              |                |
| • during operation                                      | -25 ... +60 °C |
| • during storage  | -40 ... +80 °C |
| • during transport                                      | -40 ... +80 °C |
| relative humidity during operation                      | 10 ... 95 %    |

#### Certificates/ approvals

| General Product Approval   | Declaration of Conformity   | Test Certificates  |
|--|---|--|
|  <a href="#">Confirmation</a> |  |   <a href="#">Type Test Certificates/Test Report</a> |

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

#### 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?mlfb=3RS7006-1FE00>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7006-1FE00>

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

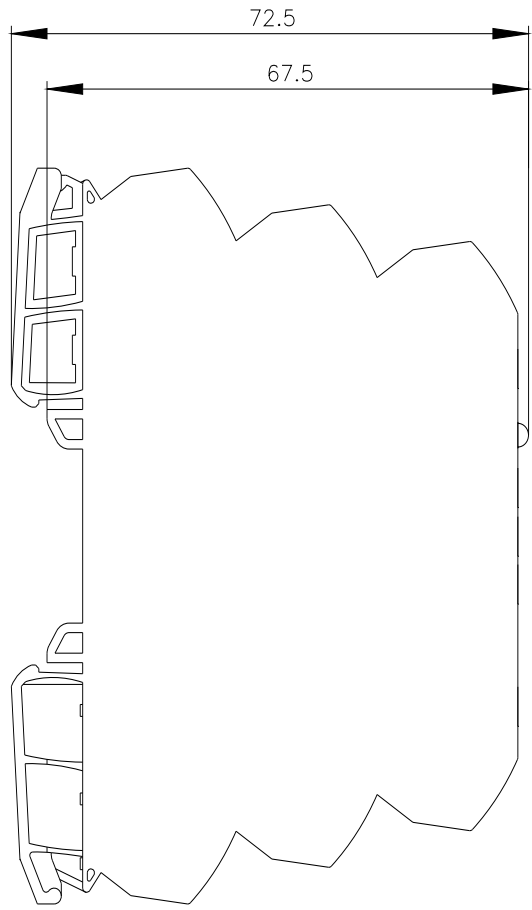
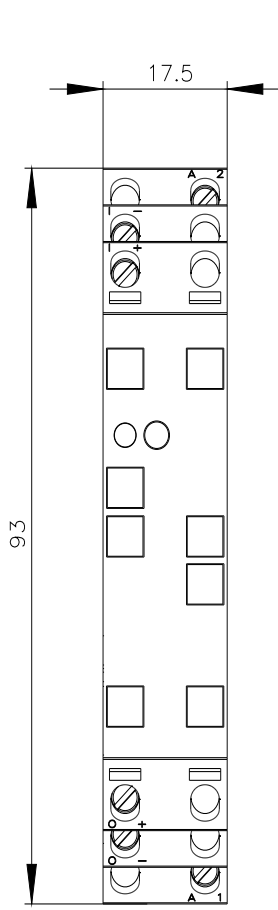
<https://support.industry.siemens.com/cs/ww/en/ps/3RS7006-1FE00>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RS7006-1FE00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RS7006-1FE00&lang=en)

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RS7006-1FE00/manual>



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