



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 0-20 V, 2-10 V, 0-5 mA, 0-10 mA 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 Spring-type terminal (push-in)

|                          |                     |
|--------------------------|---------------------|
| Product brand name       | SIRIUS              |
| Product category         | Signal converter    |
| Product designation      | universal converter |
| Design of the product    | active, switchable  |
| Product type designation | 3RS70               |

| General technical data                                                                                                                                                       |                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Display version LED                                                                                                                                                          | Yes                              |
| Number of channels                                                                                                                                                           | 1                                |
| Consumed active power                                                                                                                                                        | 0.5 W                            |
| Insulation voltage <ul style="list-style-type: none"> <li>• for overvoltage category III according to IEC 60664</li> <li>— with degree of pollution 3 rated value</li> </ul> | 50 V                             |
| Surge voltage resistance rated value                                                                                                                                         | 4 000 V                          |
| Protection class IP                                                                                                                                                          | IP20                             |
| Shock resistance <ul style="list-style-type: none"> <li>• acc. to IEC 60068-2-27</li> </ul>                                                                                  | sinusoidal half-wave 15g / 11 ms |
| Vibration resistance <ul style="list-style-type: none"> <li>• acc. to IEC 60068-2-6</li> </ul>                                                                               | 6 ... 150 Hz: 2 g                |

|                                                          |                                                                                                                                                                                                  |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reference code acc. to DIN EN 81346-2                    | T                                                                                                                                                                                                |
| Reference code acc. to DIN EN 61346-2                    | K                                                                                                                                                                                                |
| <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                                                                                                                                                                                             |
| <b>Supply voltage frequency</b>                          |                                                                                                                                                                                                  |
| • 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>Outputs</b>                                           |                                                                                                                                                                                                  |
| <b>Load</b>                                              |                                                                                                                                                                                                  |
| • at voltage output minimum                              | 2 kΩ                                                                                                                                                                                             |
| • at the current output maximum                          | 500 Ω                                                                                                                                                                                            |
| <b>Electromagnetic compatibility</b>                     |                                                                                                                                                                                                  |
| <b>EMC emitted interference</b>                          |                                                                                                                                                                                                  |
| • acc. to IEC 60947-1                                    | Environment B                                                                                                                                                                                    |
| <b>EMI immunity</b>                                      |                                                                                                                                                                                                  |
| • acc. to IEC 60947-1                                    | corresponds to degree of severity 3                                                                                                                                                              |

|                                                             |                                             |
|-------------------------------------------------------------|---------------------------------------------|
| <b>Conducted interference</b>                               |                                             |
| • due to burst acc. to IEC 61000-4-4                        | 1 kV 5/50 ns                                |
| • due to conductor-conductor surge acc. to IEC 61000-4-5    | 1 kV                                        |
| <b>Field-bound parasitic coupling acc. to IEC 61000-4-3</b> | 10 V/m                                      |
| <b>Electrostatic discharge acc. to IEC 61000-4-2</b>        | 6 kV contact discharge / 8 kV air discharge |

#### Galvanic isolation

|                                                 |         |
|-------------------------------------------------|---------|
| <b>Design of the electrical isolation</b>       | 3 paths |
| <b>Galvanic isolation</b>                       |         |
| • between entrance and outlet                   | Yes     |
| • between the outputs                           | No      |
| • between the inputs                            | No      |
| • between the voltage supply and other circuits | Yes     |

#### Connections/ Terminals

|                                                                |                                    |
|----------------------------------------------------------------|------------------------------------|
| <b>Type of electrical connection</b>                           | spring-loaded 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> ) |
| • finely stranded without core end processing                  | 1x (0.25 ... 2.5 mm <sup>2</sup> ) |
| • at AWG conductors solid                                      | 1 x (20 ... 14)                    |
| • at AWG conductors stranded                                   | 1x (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>       |
| • finely stranded without core end processing                  | 0.25 ... 2.5 mm <sup>2</sup>       |
| <b>AWG number as coded connectable conductor cross section</b> |                                    |
| • solid                                                        | 20 ... 14                          |
| • stranded                                                     | 20 ... 14                          |

#### Installation/ mounting/ dimensions

|                              |                  |
|------------------------------|------------------|
| <b>Mounting position</b>     | any              |
| <b>Mounting type</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

|                                                        |             |
|--------------------------------------------------------|-------------|
| <b>Installation altitude at height above sea level</b> |             |
| • maximum                                              | 2 000 m     |
| <b>Relative humidity</b>                               |             |
| • during operation                                     | 10 ... 95 % |

#### Certificates/ approvals

| General Product Approval                                                                                                                                                                                                                                                                                                                                               | Declaration of Conformity     | Test Certificates                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------------------------------|
|  CSA  UL  EAC  CE EG-Konf. | <a href="#">Miscellaneous</a> | <a href="#">Type Test Certificates/Test Report</a> |

|                                |              |
|--------------------------------|--------------|
| <b>Marine / Ship-<br/>ping</b> | <b>other</b> |
|--------------------------------|--------------|



[Confirmation](#)

#### Further information

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

[www.siemens.com/sirius/catalogs](http://www.siemens.com/sirius/catalogs)

**Industry Mall (Online ordering system)**

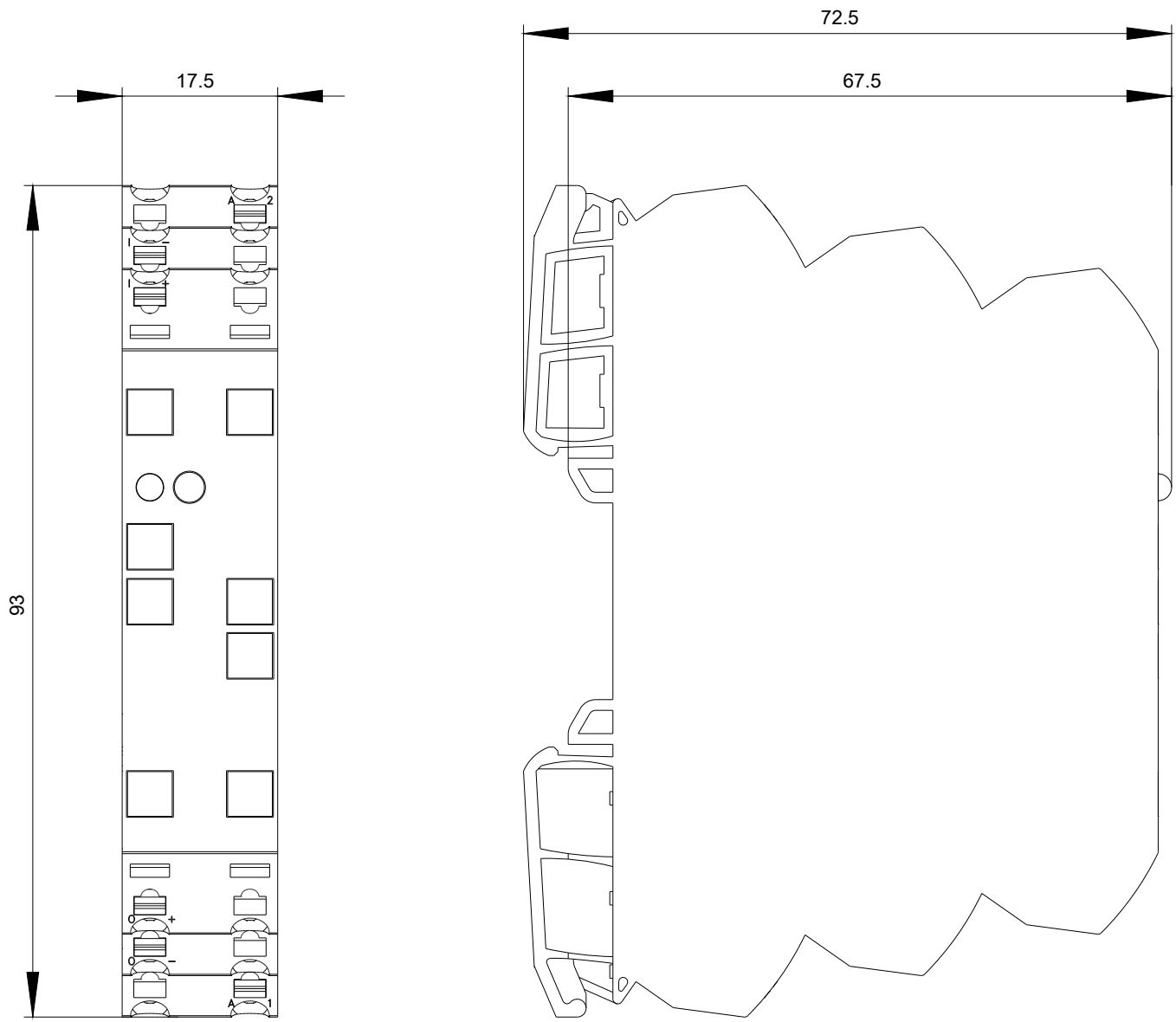
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RS7006-2FE00>

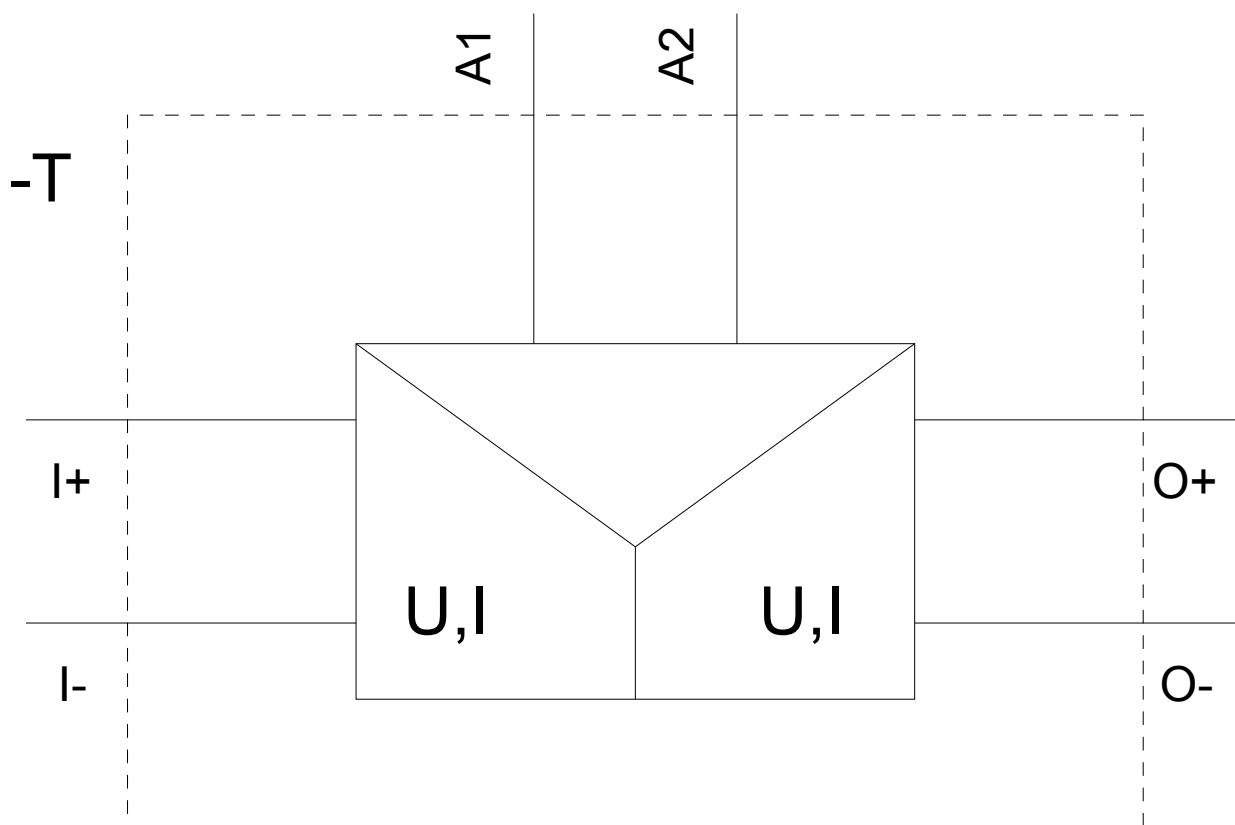
**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7006-2FE00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RS7006-2FE00>





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