

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



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
Surge voltage resistance rated value	4 000 V
Protection class IP	IP20
Shock resistance	
• acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
Reference code acc. to DIN EN 81346-2	T
Reference code acc. to DIN EN 61346-2	K

Supply voltage	
Supply voltage at AC	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V

Supply voltage at DC rated value	24 V
Supply voltage frequency	
• rated value	60 ... 50 Hz
Operating range factor supply voltage rated value	
• 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>	
Relative metering precision	0.1 %
Relative linearity deviation	0.05 %
Temperature drift per °C	0.015 %/°C
Voltage ripple maximum	20 mV
Limit frequency	30 Hz
Settling time for 1 % deviation	17 ms
Rise time	6 ms

<b>Main circuit</b>	
Type of voltage	AC/DC

<b>Inputs/ Outputs</b>	
Input voltage	30 V
Property of the output Short-circuit proof	Yes
Type of signal at input	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
Type of signal at output	0 ... 10 V, 0 ... 20 mA, 4 ... 20 mA
Input impedance of current input maximum	100 Ω
Input impedance of voltage input minimum	330 kΩ

<b>Outputs</b>	
Load	
• at voltage output minimum	2 kΩ
• at the current output maximum	500 Ω

<b>Electromagnetic compatibility</b>	
EMC emitted interference	
• acc. to IEC 60947-1	Environment B
EMI immunity	
• acc. to IEC 60947-1	corresponds to degree of severity 3
Conducted interference	
• 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
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m
Electrostatic discharge acc. to IEC 61000-4-2	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>	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 conductors 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
<b>Tightening torque</b>	
• with screw-type terminals	0.5 ... 0.6 N·m

## 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  EG-Konf.	<a href="#">Miscellaneous</a>	<a href="#">Type Test Certificates/Test Report</a>
<b>Marine / Ship- 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=3RS7006-1FE00>

**Cax online generator**

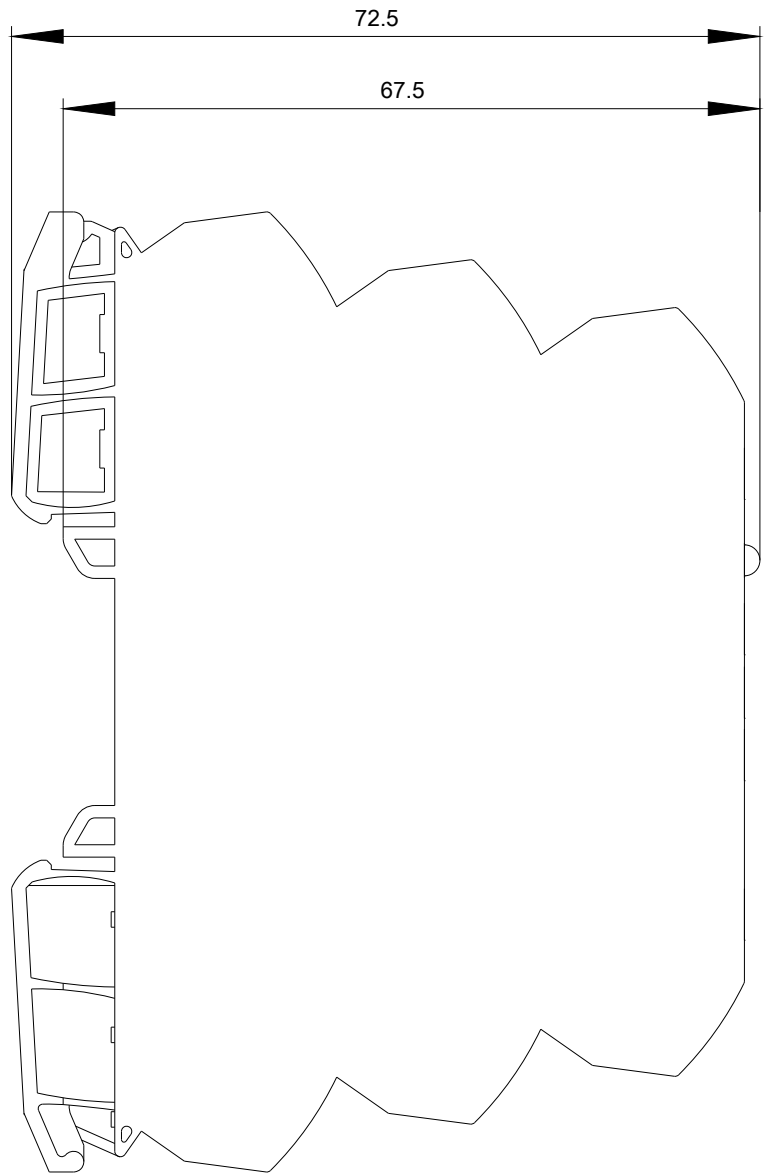
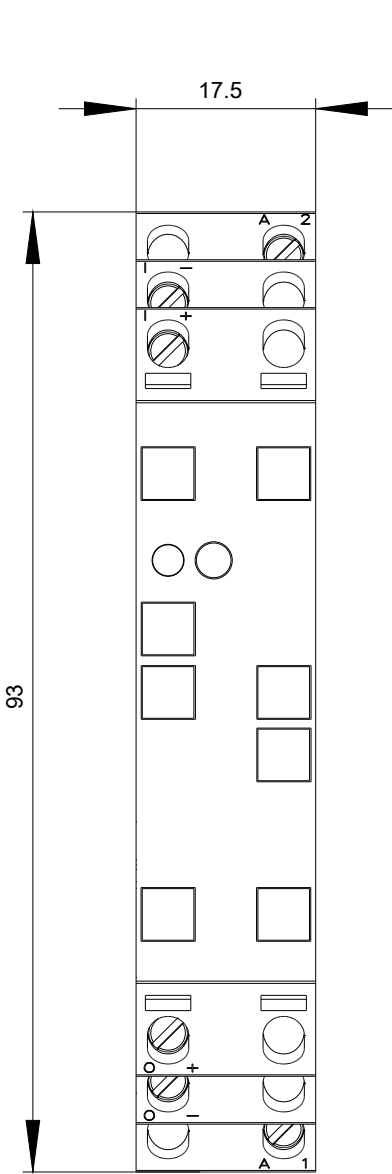
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7006-1FE00>

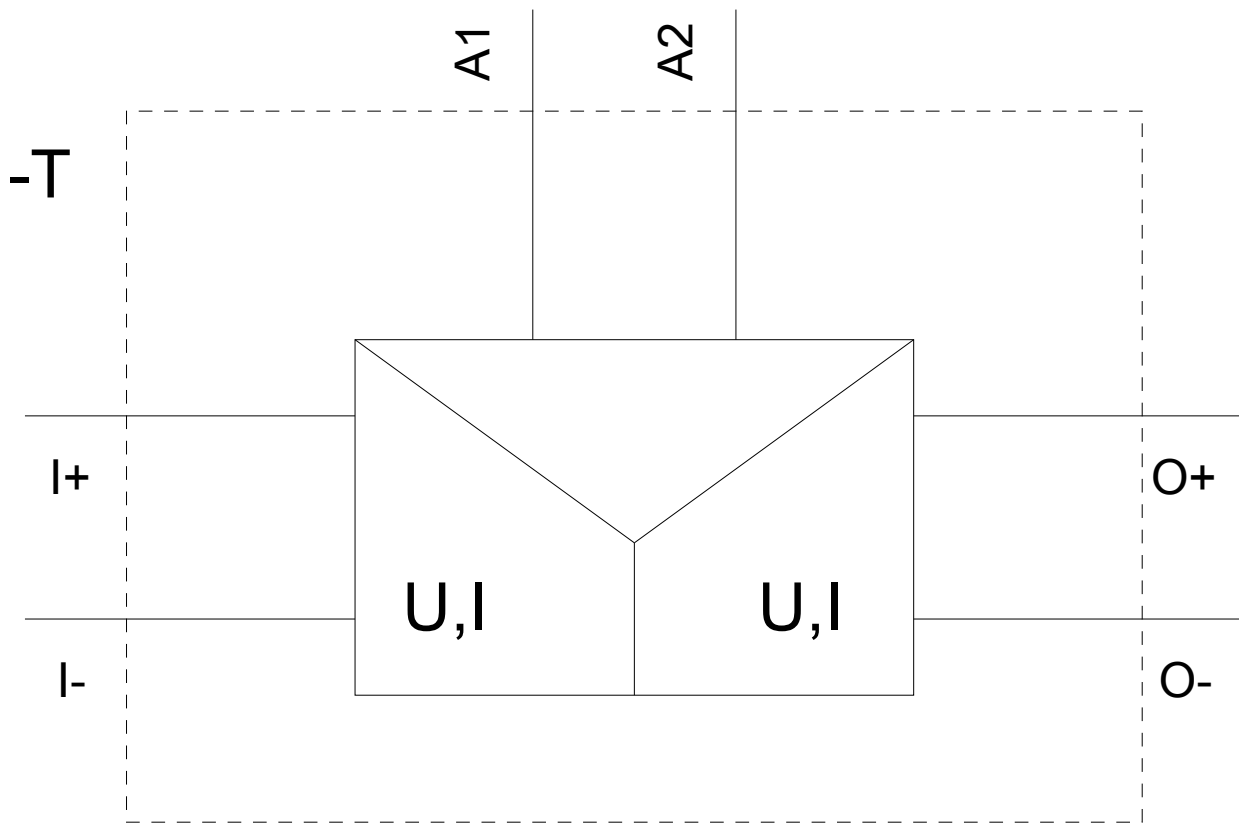
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<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)





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