



Separation amplifier 24-240 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 for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
surge voltage resistance rated value	4 000 V
protection class IP	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
reference code according to IEC 81346-2	T
Substance Prohibitance (Date)	03/25/2015

### Supply voltage

supply voltage at AC	
• at 50 Hz rated value	24 ... 240 V
• at 60 Hz rated value	24 ... 240 V
supply voltage at DC rated value	24 ... 240 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

### Precision

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

### Main circuit

type of voltage	AC/DC
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### Inputs/ Outputs

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

**type of signal at output**

**input impedance of current input maximum**

**input impedance of voltage input minimum**

**output load**

- at voltage output minimum
- at the current output maximum

... 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  
0 ... 10 V, 0 ... 20 mA, 4 ... 20 mA  
100 Ω  
330 kΩ  
2 kΩ  
500 Ω

### Electromagnetic compatibility

EMC emitted interference according to IEC 60947-1

EMC immunity according to IEC 60947-1

**conducted interference**

- due to burst according to IEC 61000-4-4
- due to conductor-conductor surge according to IEC 61000-4-5

**field-based interference according to IEC 61000-4-3**

**electrostatic discharge according to IEC 61000-4-2**

Environment B  
corresponds to degree of severity 3  
1 kV 5/50 ns  
1 kV  
10 V/m  
6 kV contact discharge / 8 kV air discharge

### Galvanic isolation

**design of the electrical isolation**

**galvanic isolation**

- between input and output
- between the outputs
- between the inputs
- between the voltage supply and other circuits

3 paths  
Yes  
No  
No  
Yes

### Connections/ Terminals

**type of electrical connection**

**type of connectable conductor cross-sections**

- solid
- finely stranded with core end processing
- finely stranded without core end processing
- at AWG cables solid
- at AWG cables stranded

**connectable conductor cross-section**

- solid
- finely stranded with core end processing
- finely stranded without core end processing

**AWG number as coded connectable conductor cross section**

- solid
- stranded

spring-loaded terminals  
1x (0.25 ... 2.5 mm<sup>2</sup>)  
1x (0.25 ... 1.5 mm<sup>2</sup>)  
1x (0.25 ... 2.5 mm<sup>2</sup>)  
1 x (20 ... 14)  
1x (20 ... 14)  
0.25 ... 2.5 mm<sup>2</sup>  
0.25 ... 1.5 mm<sup>2</sup>  
0.25 ... 2.5 mm<sup>2</sup>  
20 ... 14  
20 ... 14

### Installation/ mounting/ dimensions

**mounting position**

**fastening method**

**height**

**width**

**depth**

**required spacing**

- with side-by-side mounting
  - forwards
  - backwards
  - upwards
  - downwards
  - at the side
- for grounded parts
  - forwards
  - backwards
  - upwards
  - at the side
  - downwards
- for live parts
  - forwards
  - backwards
  - upwards

any  
snap-on mounting  
93 mm  
17.5 mm  
72.5 mm  
0 mm  
0 mm  
0 mm  
0 mm  
0 mm  
0 mm  
0 mm  
0 mm  
0 mm  
0 mm  
0 mm  
0 mm  
0 mm

- downwards
- at the side

0 mm  
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



[Confirmation](#)



##### Test Certificates

##### Marine / Shipping

##### other

[Type Test Certificates/Test Report](#)



[Confirmation](#)

#### Further information

##### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

##### 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=3RS7006-2FW00>

##### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7006-2FW00>

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

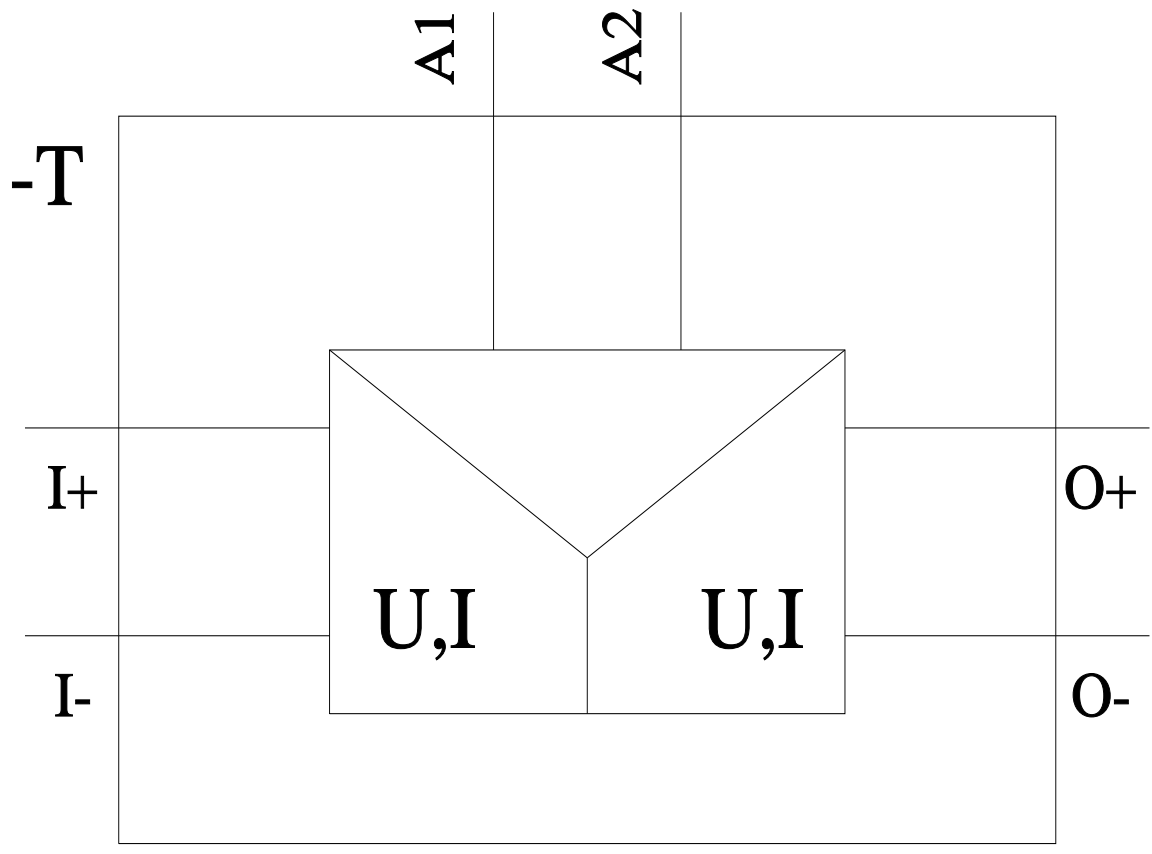
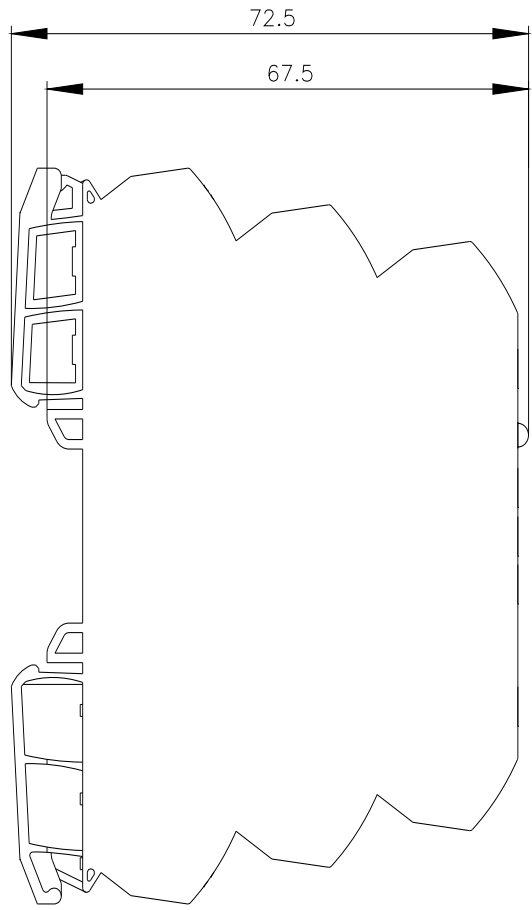
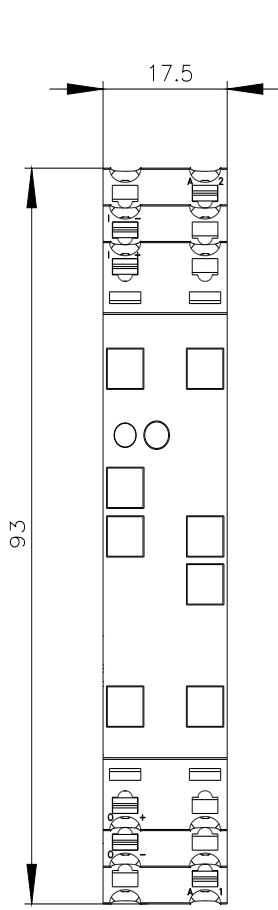
<https://support.industry.siemens.com/cs/ww/en/ps/3RS7006-2FW00>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RS7006-2FW00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RS7006-2FW00&lang=en)

##### Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RS7006-2FW00/manual>



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