

Separation amplifier 24 V AC/DC, 3-way separation input: 0-10 V  
output: 0-10 V Spring-type terminal (push-in)



product brand name	SIRIUS
Product category	Signal converter
Product designation	Single-range converters
Design of the product	active
Product type designation	3RS70

General technical data	
Display version LED	Yes
number of channels	1
consumed active power	0.29 W
<ul style="list-style-type: none"> <li>— insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value</li> </ul>	50 V
Surge voltage resistance rated value	2 500 V
<ul style="list-style-type: none"> <li>• Protection class IP</li> </ul>	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
<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 ... 10 V
<b>Type of signal at output</b>	0 ... 10 V
<b>Input impedance of voltage input minimum</b>	330 kΩ
<b>Outputs</b>	
<b>Load</b>	
• at voltage output minimum	2 kΩ
<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
<b>Galvanic isolation</b>	
<ul style="list-style-type: none"> <li>• <b>design of the electrical isolation</b></li> </ul>	3 paths
<ul style="list-style-type: none"> <li>• Galvanic isolation between entrance and outlet</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• galvanic isolation between the outputs</li> </ul>	No
<ul style="list-style-type: none"> <li>• Galvanic isolation between the inputs</li> </ul>	No
<ul style="list-style-type: none"> <li>• Galvanic isolation between the voltage supply and other circuits</li> </ul>	Yes
<b>Connections/ Terminals</b>	
<ul style="list-style-type: none"> <li>• <b>type of electrical connection</b></li> </ul>	spring-loaded terminals
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections solid</li> </ul>	1x (0.25 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• Type of connectable conductor cross-sections finely stranded with core end processing</li> </ul>	1x (0.25 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• Type of connectable conductor cross-sections finely stranded without core end processing</li> </ul>	1x (0.25 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• Type of connectable conductor cross-sections at AWG conductors solid</li> </ul>	1 x (20 ... 14)
<ul style="list-style-type: none"> <li>• Type of connectable conductor cross-sections at AWG conductors stranded</li> </ul>	1x (20 ... 14)
<ul style="list-style-type: none"> <li>• connectable conductor cross-section solid</li> </ul>	0.25 ... 2.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• connectable conductor cross-section finely stranded with core end processing</li> </ul>	0.25 ... 1.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• connectable conductor cross-section finely stranded without core end processing</li> </ul>	0.25 ... 2.5 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	20 ... 14
<ul style="list-style-type: none"> <li>• stranded</li> </ul>	20 ... 14
<b>Installation/ mounting/ dimensions</b>	
<ul style="list-style-type: none"> <li>• <b>mounting position</b></li> </ul>	any
<b>Mounting type</b>	snap-on mounting
<b>Height</b>	93 mm
<b>Width</b>	6.2 mm
<b>Depth</b>	72.5 mm
<b>Required spacing</b>	
<ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul>	0 mm 0 mm 0 mm 0 mm 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

0 mm
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0 mm
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0 mm

### Ambient conditions

<b>Installation altitude at height above sea level</b>	
• 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
 CSA  UL	 EAC  EG-Konf.	<a href="#">Miscellaneous</a> <a href="#">Type Test Certificates/Test Report</a>

<b>Marine / Shipping</b>	<b>other</b>
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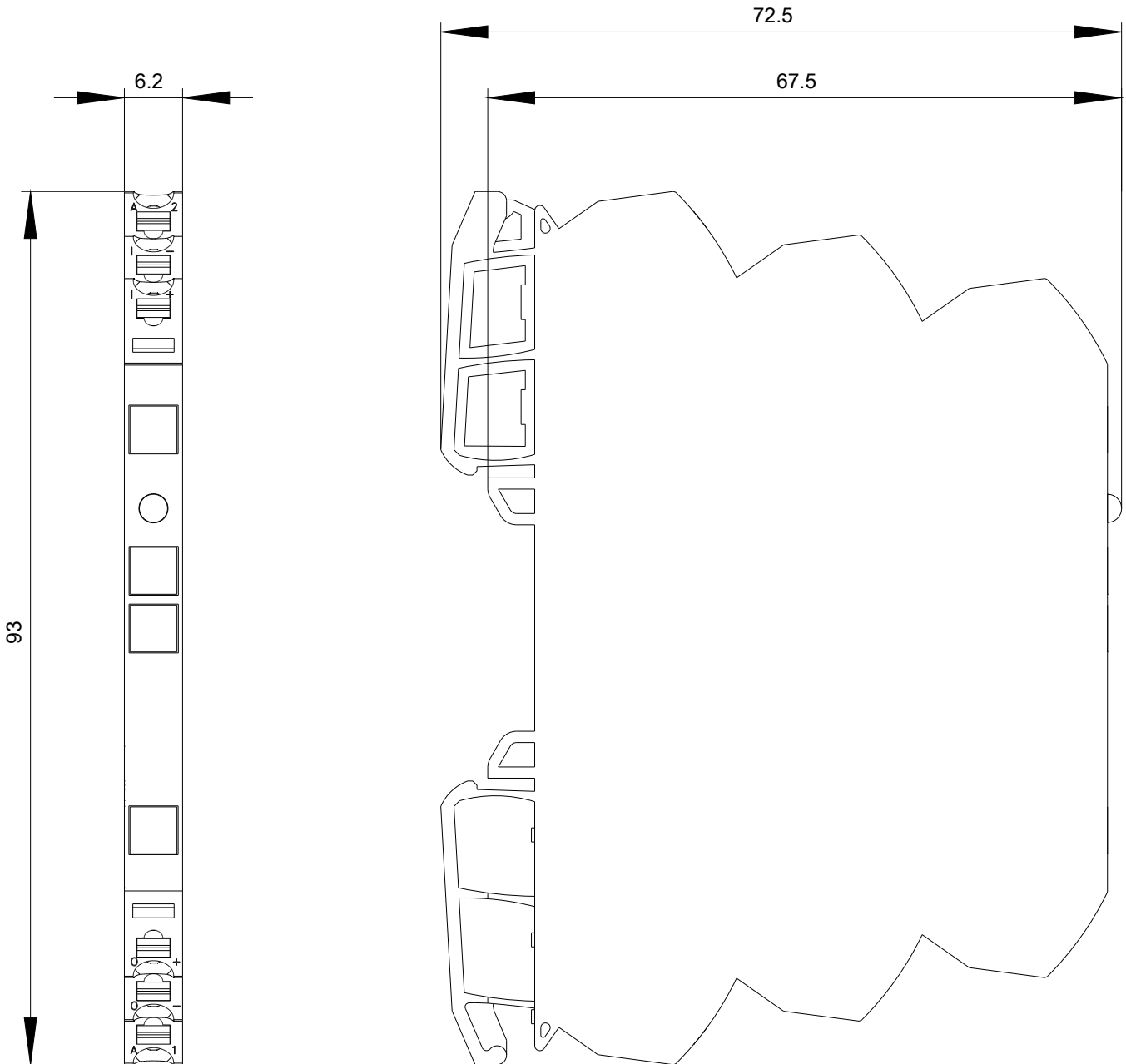


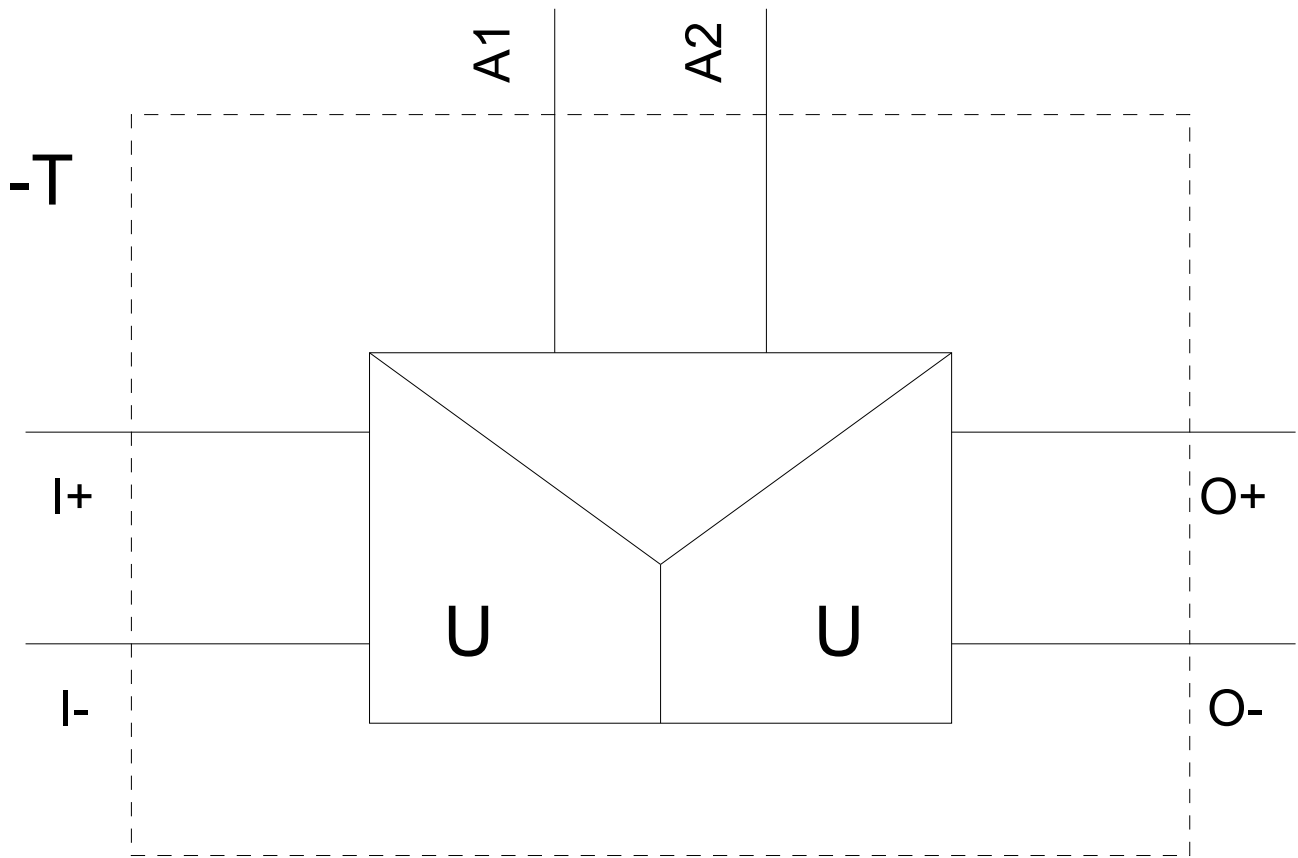
[Confirmation](#)

### 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=3RS7000-2AE00>
- Cax online generator**  
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7000-2AE00>

**Characteristic: Derating**





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08/14/2020