



Signal converter 24-240 V AC/DC, 3-way separation Input: 0-10 V, 0/4 - 20 mA; Output: 0 - 10 V, 0/4 - 20 mA Spring-type terminal (push-in)

<b>product brand name</b>	SIRIUS
<b>product category</b>	Signal converter
<b>product designation</b>	multi-range converters
<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	300 V
<b>surge voltage resistance rated value</b>	4 000 V
<b>protection class IP</b>	IP20
shock resistance acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
vibration resistance acc. to IEC 60068-2-6	6 ... 150 Hz: 2 g
<b>reference code acc. to IEC 81346-2</b>	T
Substance Prohibitance (Date)	25.03.2015 00:00:00
<b>Supply voltage</b>	
<b>supply voltage at AC</b>	
• at 50 Hz rated value	24 ... 240 V
• at 60 Hz rated value	24 ... 240 V
<b>supply voltage at DC rated value</b>	24 ... 240 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

Inputs/ Outputs	
input voltage	30 V
property of the output short-circuit proof	Yes
type of signal at input	0 ... 10 V, 0 ... 20 mA, 4 ... 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
Outputs	
output load	
<ul style="list-style-type: none"> <li>at voltage output minimum</li> <li>at the current output maximum</li> </ul>	2 kΩ 500 Ω
Electromagnetic compatibility	
EMC emitted interference acc. to IEC 60947-1	Environment B
EMC immunity acc. to IEC 60947-1	corresponds to degree of severity 3
conducted interference	
<ul style="list-style-type: none"> <li>due to burst acc. to IEC 61000-4-4</li> <li>due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	1 kV 5/50 ns 1 kV
field-based interference 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	
design of the electrical isolation	3 paths
galvanic isolation	
<ul style="list-style-type: none"> <li>between input and output</li> <li>between the outputs</li> <li>between the inputs</li> <li>between the voltage supply and other circuits</li> </ul>	Yes No No Yes
Connections/ Terminals	
type of electrical connection	spring-loaded terminals
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul>	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)
connectable conductor cross-section	
<ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> </ul>	0.25 ... 2.5 mm <sup>2</sup> 0.25 ... 1.5 mm <sup>2</sup> 0.25 ... 2.5 mm <sup>2</sup>
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> <li>solid</li> <li>stranded</li> </ul>	20 ... 14 20 ... 14
Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on mounting
height	93 mm
width	17.5 mm
depth	72.5 mm
required spacing	
<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> <li>for grounded parts               <ul style="list-style-type: none"> <li>— forwards</li> </ul> </li> </ul>	0 mm 0 mm 0 mm 0 mm 0 mm 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	Marine / Shipping
			
		<a href="#">Type Test Certificates/Test Report</a>	

#### other

[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=3RS7005-2FW00>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7005-2FW00>

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

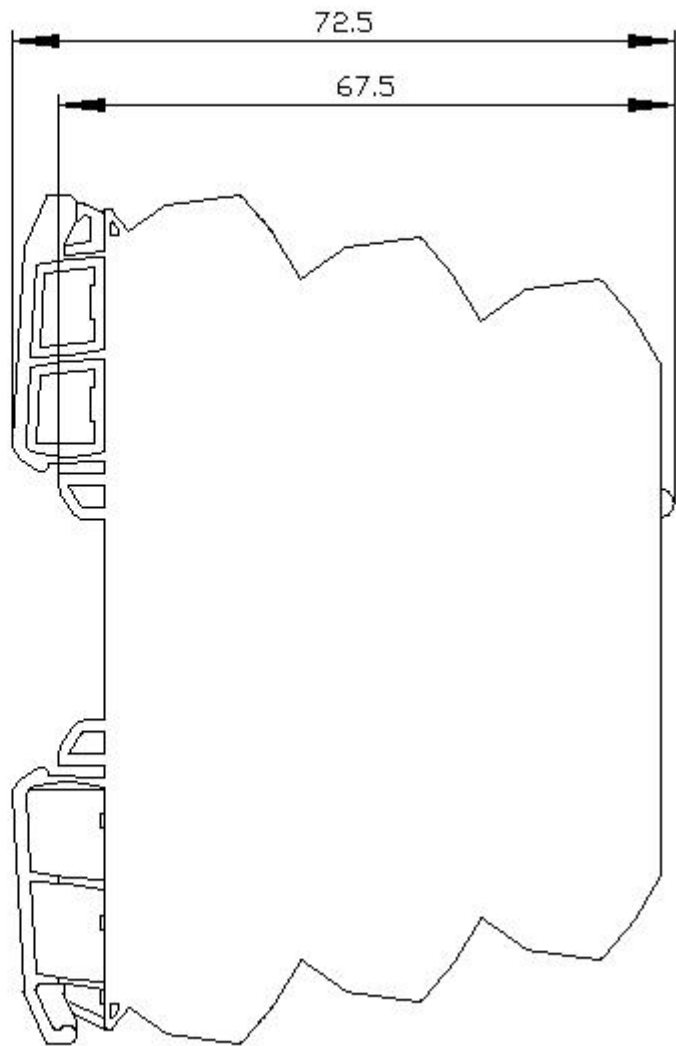
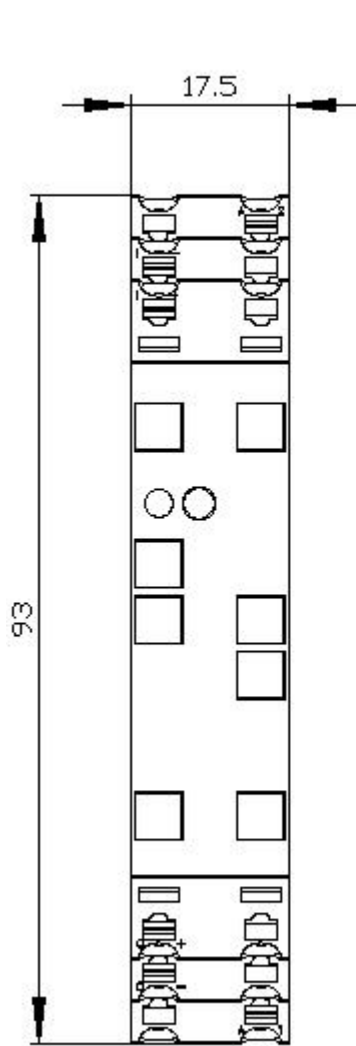
<https://support.industry.siemens.com/cs/ww/en/ps/3RS7005-2FW00>

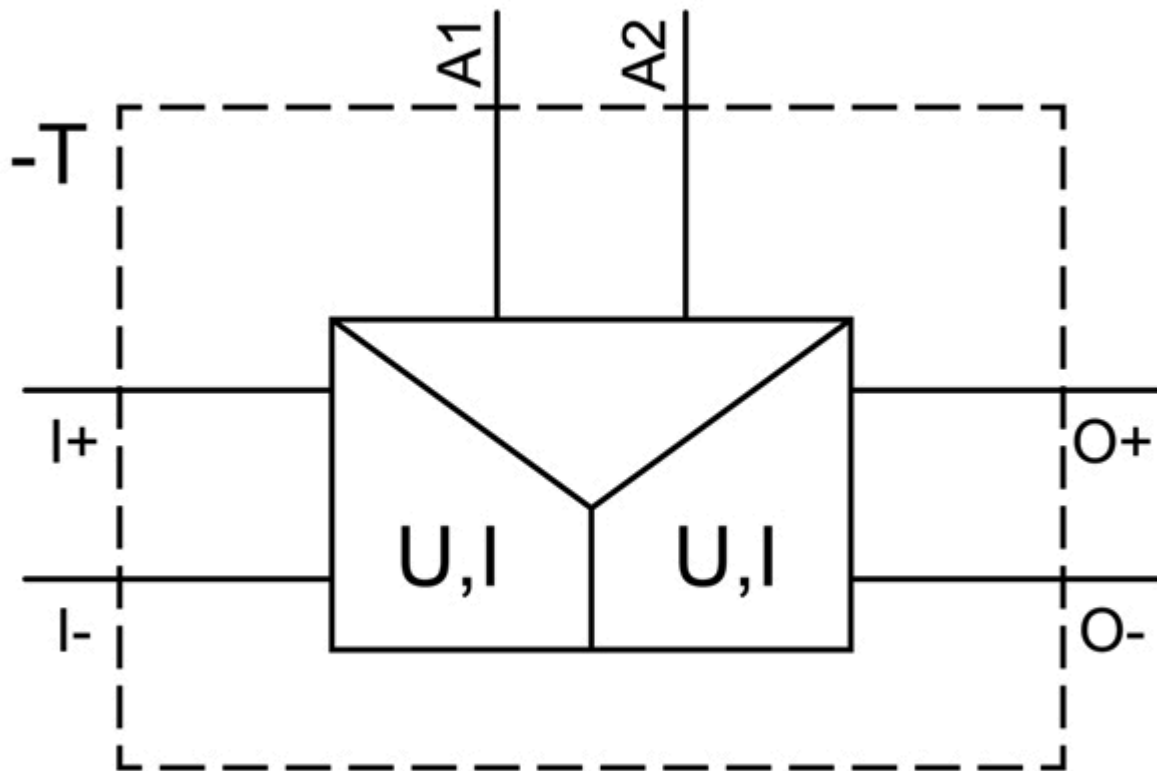
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RS7005-2FW00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RS7005-2FW00&lang=en)

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RS7005-2FW00/manual>





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