



Signal converter 24-240 V AC/DC, 3-way separation Input: 0-10 V, 0/4 - 20 mA; Output: 0-50/100 Hz/1/10 kHz; 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>	0.34 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
<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>limit frequency</b>	30 Hz
<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, 0 ... 20 mA, 4 ... 20 mA
<b>type of signal at output</b>	0 ... 50 Hz, 0 ... 100 Hz, 0 ... 1 kHz, 0 ... 10 kHz
<b>input impedance of current input maximum</b>	100 Ω
<b>input impedance of voltage input minimum</b>	330 kΩ
<b>Electromagnetic compatibility</b>	
EMC emitted interference acc. to IEC 60947-1	Environment B
<b>EMC immunity acc. to IEC 60947-1</b>	corresponds to degree of severity 3
<b>conducted interference</b>	
<ul style="list-style-type: none"> <li>• due to burst acc. to IEC 61000-4-4</li> </ul>	1 kV 5/50 ns
<ul style="list-style-type: none"> <li>• due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	1 kV
<b>field-based interference 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>	
<b>design of the electrical isolation</b>	3 paths
<b>galvanic isolation</b>	
<ul style="list-style-type: none"> <li>• between input and output</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• between the outputs</li> </ul>	No
<ul style="list-style-type: none"> <li>• between the inputs</li> </ul>	No
<ul style="list-style-type: none"> <li>• between the voltage supply and other circuits</li> </ul>	Yes
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b>	spring-loaded terminals
<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	1x (0.25 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>	1x (0.25 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• finely stranded without core end processing</li> </ul>	1x (0.25 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• at AWG cables solid</li> </ul>	1 x (20 ... 14)
<ul style="list-style-type: none"> <li>• at AWG cables 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>
<ul style="list-style-type: none"> <li>• AWG number as coded connectable conductor cross section solid</li> </ul>	20 ... 14
<ul style="list-style-type: none"> <li>• AWG number as coded connectable conductor cross section stranded</li> </ul>	20 ... 14
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any
<b>fastening method</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>	
<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
<ul style="list-style-type: none"> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> </ul>	0 mm
<ul style="list-style-type: none"> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> </ul> </li> </ul>	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
<ul style="list-style-type: none"> <li>• ambient temperature during operation</li> <li>• ambient temperature during storage</li> <li>• ambient temperature during transport</li> </ul>	-25 ... +60 °C -40 ... +80 °C -40 ... +80 °C
relative humidity during operation	10 ... 95 %

#### Certificates/ approvals

##### General Product Approval



EG-Konf.

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

##### Declaration of Conformity

##### Test Certificates

##### Marine / Shipping

##### 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?mfb=3RS7005-2KW00>

##### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RS7005-2KW00>

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

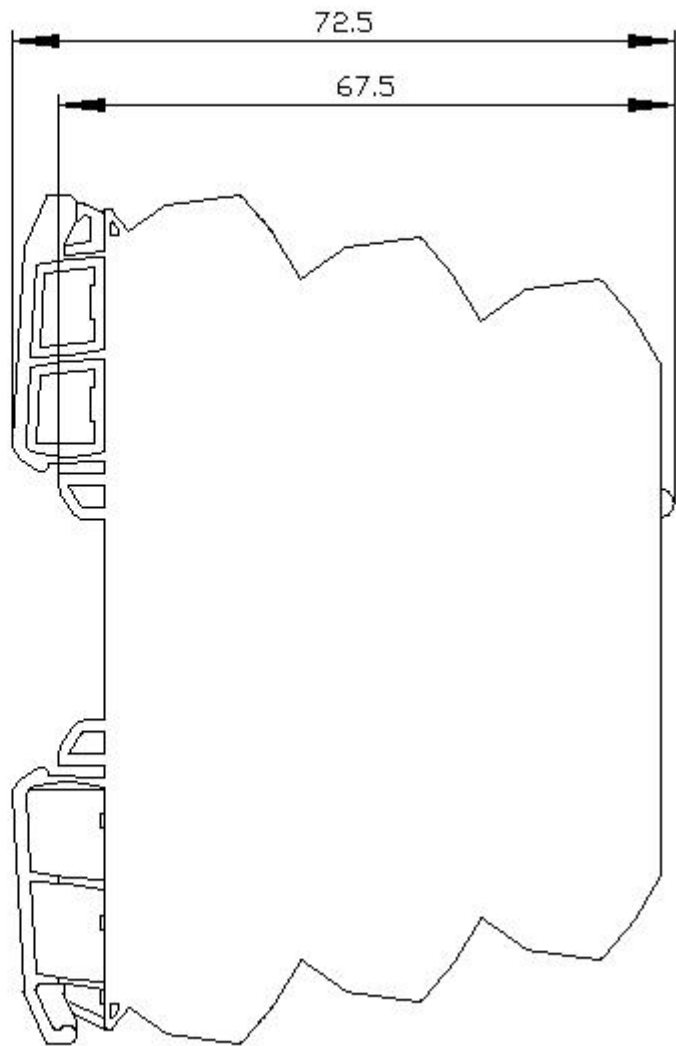
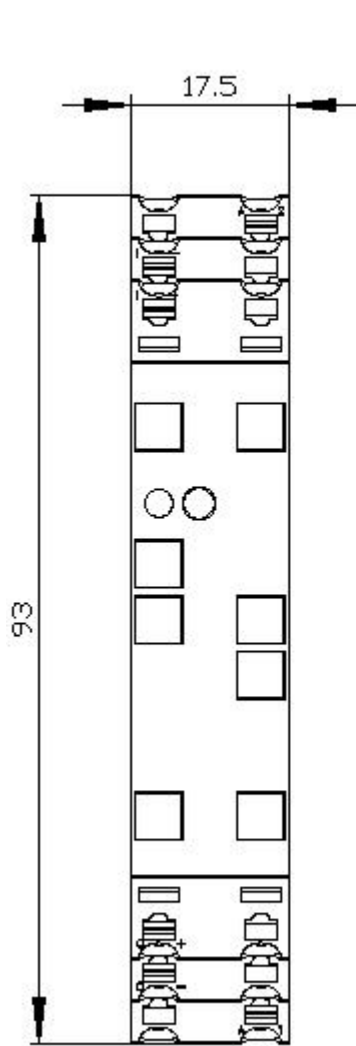
<https://support.industry.siemens.com/cs/ww/en/ps/3RS7005-2KW00>

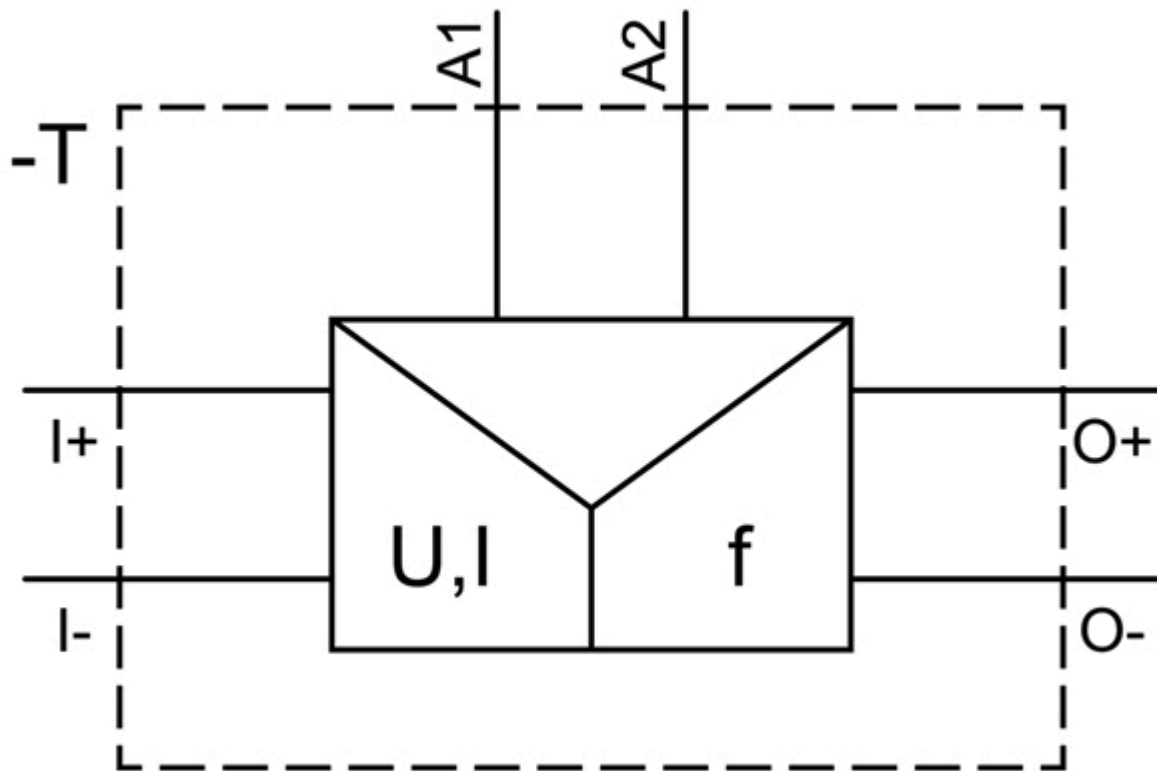
##### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RS7005-2KW00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RS7005-2KW00&lang=en)

##### Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RS7005-2KW00/manual>





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