



Separation amplifier Loop power isolator, 1-channel input: 4-20 mA output: 4-20 mA Width 6.2 mm screw terminal

product brand name	SIRIUS
product category	Signal converter
product designation	Single-range converters
design of the product	passive
product type designation	3RS70
<b>General technical data</b>	
display version LED	No
number of channels	1
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	50 V
voltage drop at operating equipment	4.1 V
surge voltage resistance rated value	1 500 V
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
Weight	0.045 kg
<b>Precision</b>	
relative metering precision	0.1 %
temperature drift per °C	0.015 %/°C
voltage ripple maximum	5 mV
settling time for 1 % deviation	6 ms
<b>Inputs/ Outputs</b>	
input voltage maximum	30 V
property of the output short-circuit proof	No
type of signal at input	4 ... 20 mA
type of signal at output	4 ... 20 mA
input impedance of current input maximum	100 Ω
output load	
• at the current output maximum	1 000 Ω
influence of the output load on measuring accuracy	0.06 %/100 Ω
<b>Electromagnetic compatibility</b>	
EMC emitted interference according to IEC 60947-1	Environment B
EMC immunity according to IEC 60947-1	corresponds to degree of severity 3
conducted interference	
• due to burst according to IEC 61000-4-4	1 kV 5/50 ns
• due to conductor-conductor surge according to IEC 61000-4-5	1 kV
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge

Galvanic isolation	
<b>design of the electrical isolation</b>	2 paths
<b>galvanic isolation</b>	
• between input and output	Yes
• between the outputs	No
• between the inputs	No
• between the voltage supply and other circuits	No
Connections/ Terminals	
<b>type of electrical connection</b>	screw terminal
<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> )
• for AWG cables 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
tightening torque with screw-type terminals	0.5 ... 0.6 N·m
Installation/ mounting/ dimensions	
<b>mounting position</b>	any
<b>fastening method</b>	snap-on mounting
<b>height</b>	93 mm
<b>width</b>	6.2 mm
<b>depth</b>	71 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	
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 %
Approvals Certificates	
<b>General Product Approval</b>	EMV



[KC](#)

[Type Test Certificates/Test Report](#)



[Confirmation](#)

[Environmental Confirmations](#)

**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)

<http://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RS7020-1ET00>

Cax online generator

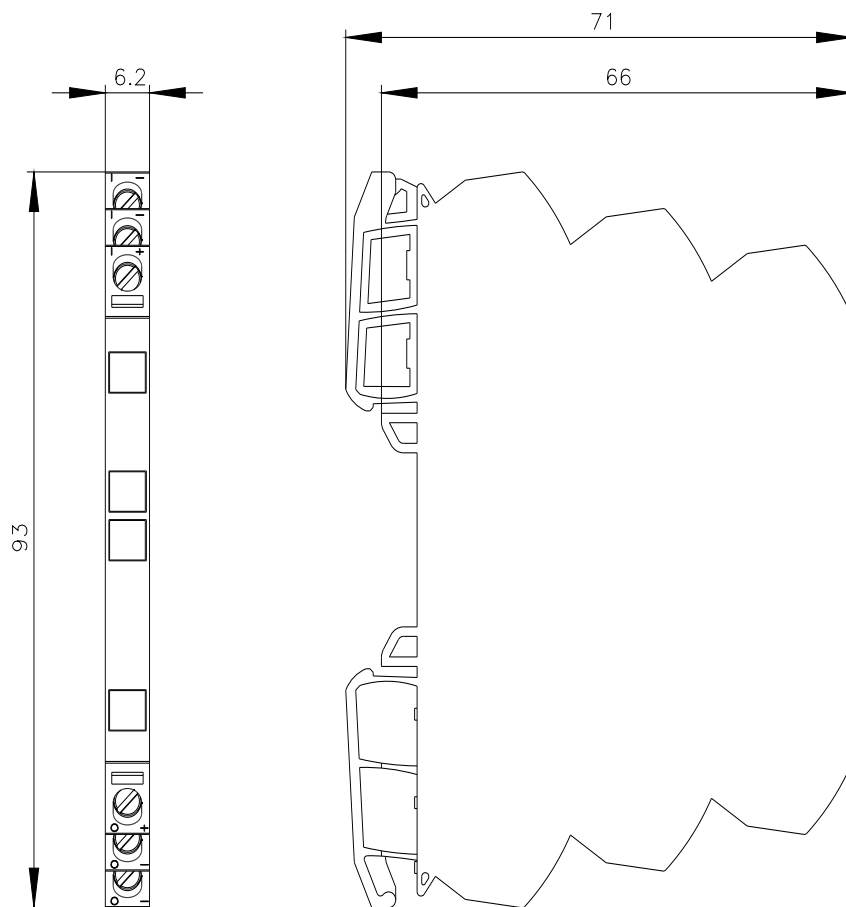
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7020-1ET00>

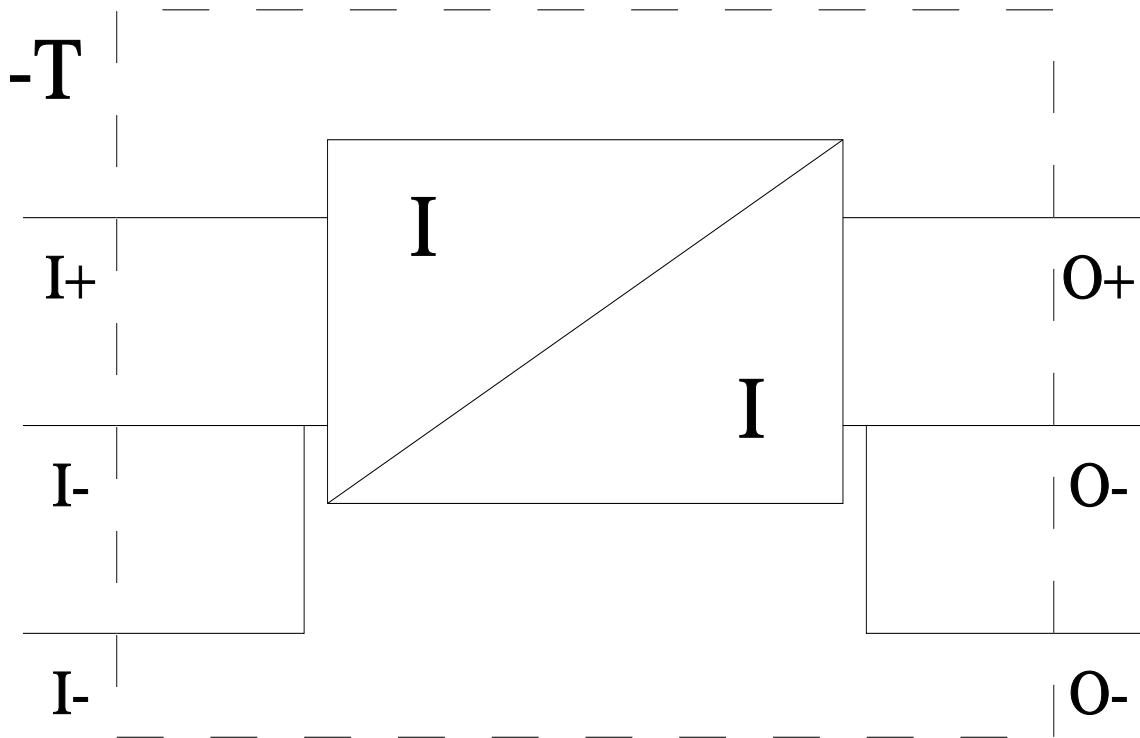
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RS7020-1ET00>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RS7020-1ET00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RS7020-1ET00&lang=en)





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