



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
General technical data	
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
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
Precision	
relative metering precision	0.1 %
temperature drift per °C	0.015 %/°C
voltage ripple maximum	5 mV
settling time for 1 % deviation	6 ms
Inputs/ Outputs	
input voltage	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
Electromagnetic compatibility	
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	
design of the electrical isolation	2 paths
galvanic isolation	
• between input and output	Yes
• between the outputs	No
• between the inputs	No
• between the voltage supply and other circuits	No
Connections/ Terminals	
type of electrical connection	screw-type terminals
type of connectable conductor cross-sections	
• solid	1x (0.25 ... 2.5 mm ²)
• finely stranded with core end processing	1x (0.25 ... 1.5 mm ²)
• for AWG cables solid	1 x (20 ... 14)
connectable conductor cross-section	
• solid	0.25 ... 2.5 mm ²
• finely stranded with core end processing	0.25 ... 1.5 mm ²
AWG number as coded connectable conductor cross section	
• solid	20 ... 14
tightening torque with screw-type terminals	0.5 ... 0.6 N·m
Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on mounting
height	93 mm
width	6.2 mm
depth	71 mm
required spacing	
• 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
ambient temperature	
• 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](#)



[Type Test Certificates/Test Report](#)



[Confirmation](#)

Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=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,...)

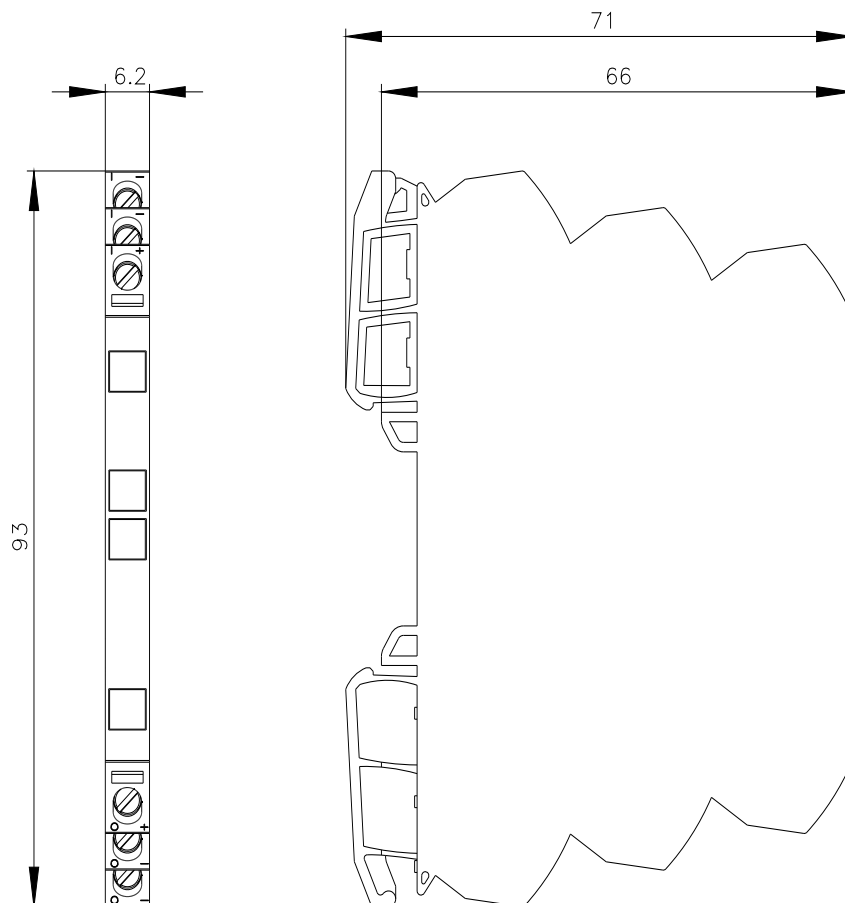
<https://support.industry.siemens.com/cs/ww/en/ps/3RS7020-1ET00>

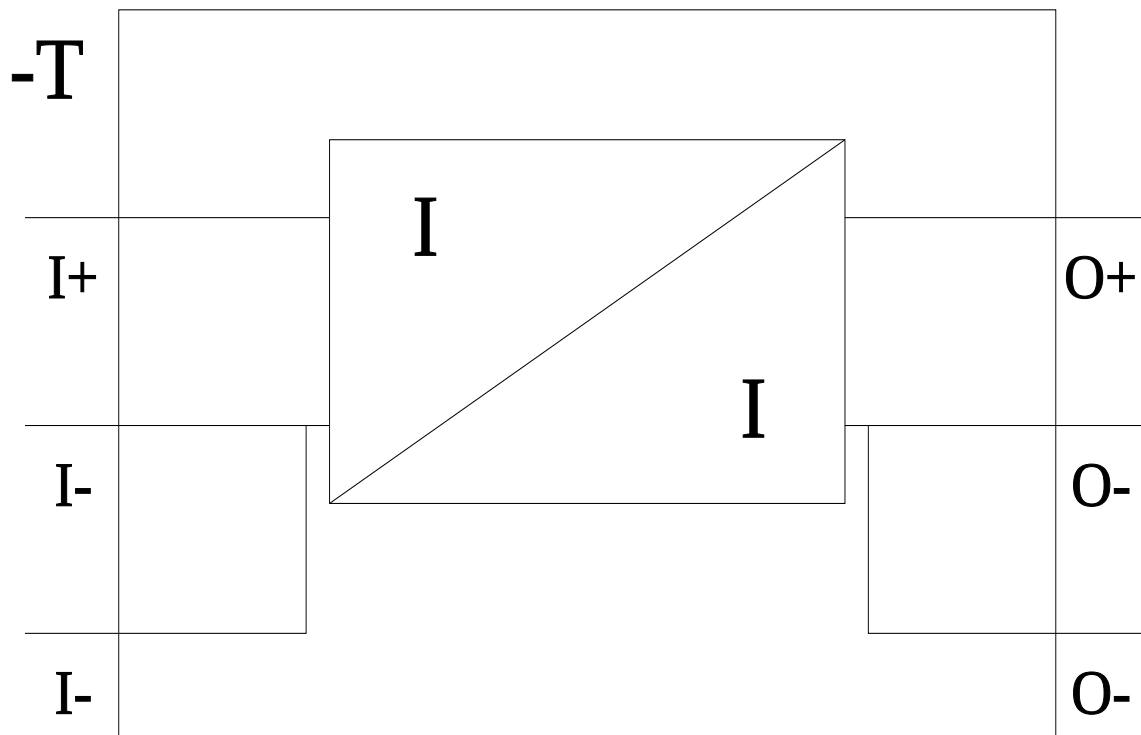
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RS7020-1ET00&lang=en

Characteristic: Derating

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





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