

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
Voltage drop at operating resource	4.1 V
Surge voltage resistance rated value	1 500 V
Protection class IP	IP20
Shock resistance	
• acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
Reference code acc. to DIN EN 81346-2	T
Reference code acc. to DIN EN 61346-2	K

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
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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

Outputs

Load	
<ul style="list-style-type: none"> at the current output maximum 	1 000 Ω
Influence of the load on measuring accuracy	0.06 %/100 Ω

Electromagnetic compatibility

EMC emitted interference	
<ul style="list-style-type: none"> acc. to IEC 60947-1 	Environment B
EMI immunity	
<ul style="list-style-type: none"> acc. to IEC 60947-1 	corresponds to degree of severity 3
Conducted interference	
<ul style="list-style-type: none"> due to burst acc. to IEC 61000-4-4 due to conductor-conductor surge acc. to IEC 61000-4-5 	1 kV 5/50 ns 1 kV
Field-bound parasitic coupling 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	2 paths
Galvanic isolation	
<ul style="list-style-type: none"> between entrance and outlet between the outputs between the inputs between the voltage supply and other circuits 	Yes No No No

Connections/ Terminals

Type of electrical connection	screw-type terminals
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> solid finely stranded with core end processing at AWG conductors solid 	1x (0.25 ... 2.5 mm ²) 1x (0.25 ... 1.5 mm ²) 1 x (20 ... 14)
Connectable conductor cross-section	
<ul style="list-style-type: none"> solid finely stranded with core end processing 	0.25 ... 2.5 mm ² 0.25 ... 1.5 mm ²
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> solid 	20 ... 14

Tightening torque	
<ul style="list-style-type: none"> • with screw-type terminals 	0.5 ... 0.6 N·m

Installation/ mounting/ dimensions

Mounting position	any
Mounting type	snap-on mounting
Height	93 mm
Width	6.2 mm
Depth	71 mm
Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm

Ambient conditions

Installation altitude at height above sea level	
<ul style="list-style-type: none"> • maximum 	2 000 m
Relative humidity	
<ul style="list-style-type: none"> • during operation 	10 ... 95 %

Certificates/ approvals

General Product Approval	Declaration of Conformity	Test Certificates
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

Marine / Shipping	other
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[Confirmation](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

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

Cax online generator

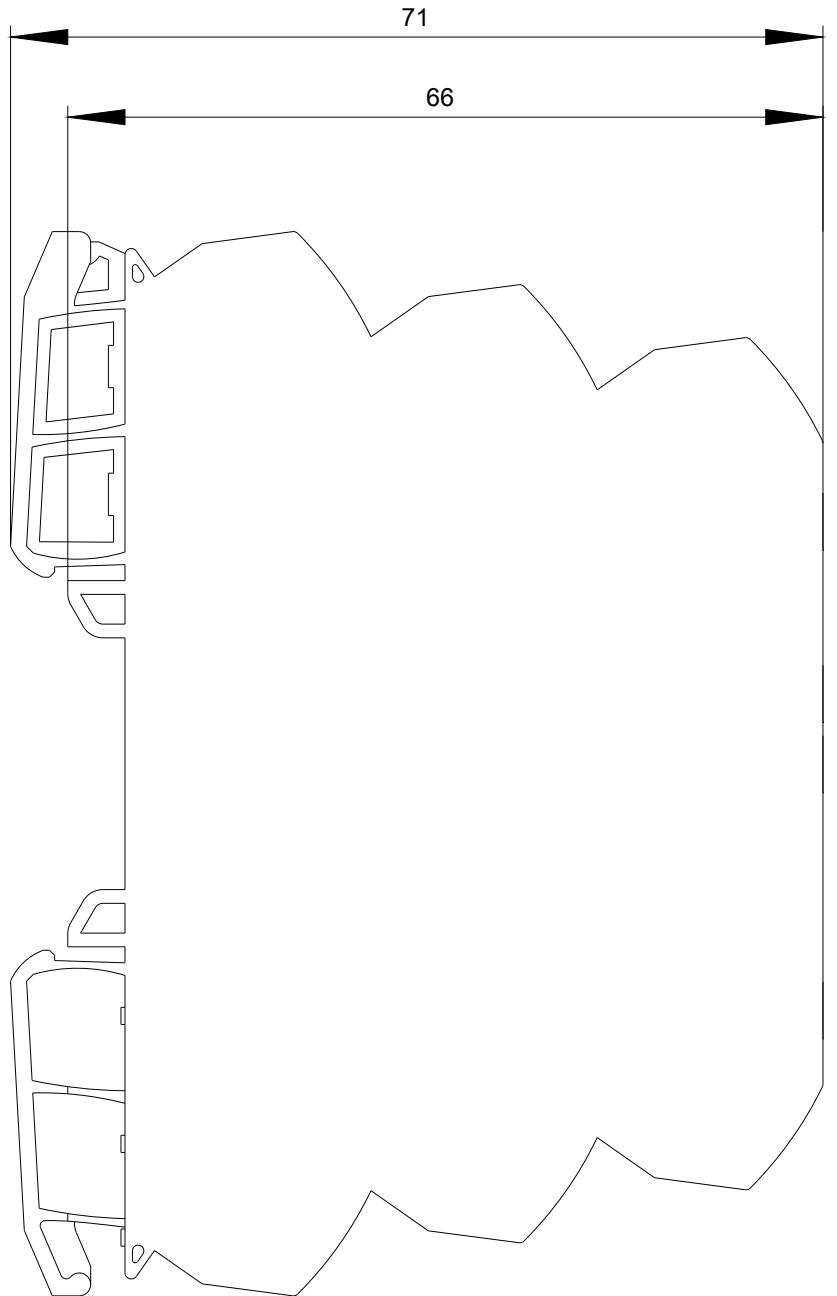
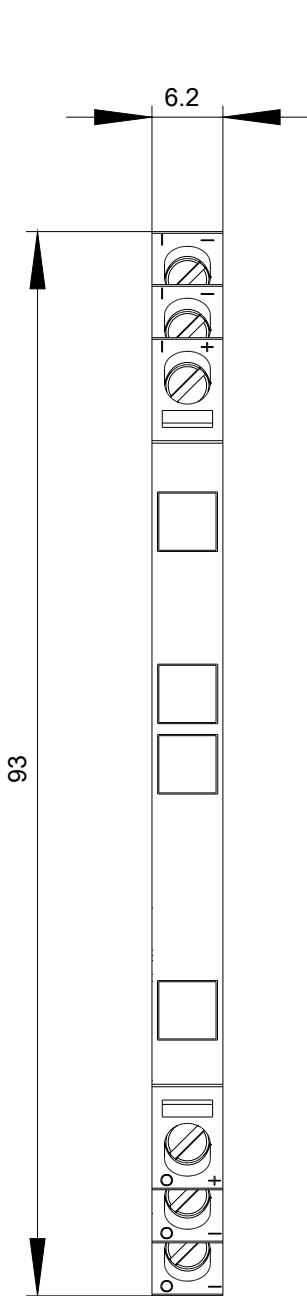
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7020-1ET00>

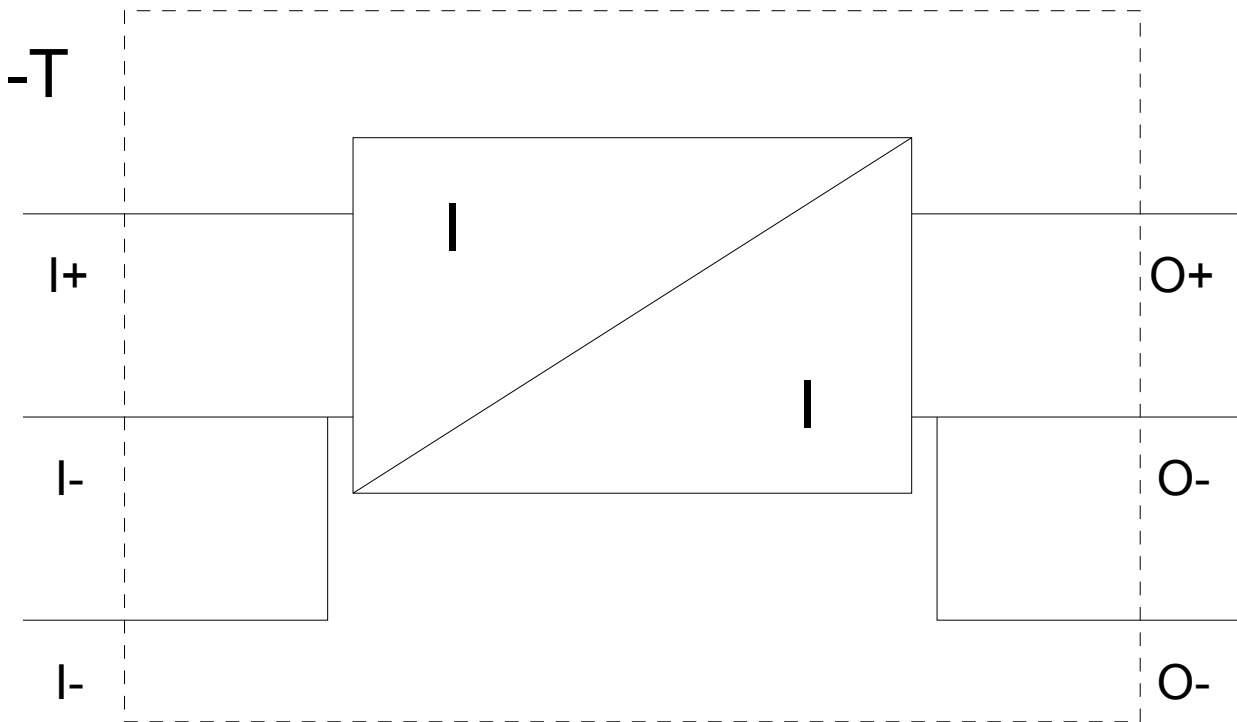
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<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





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