



Separation amplifier 24-240 V AC/DC, 3-way separation input: 0-60 mV, 0-100 mV 0-300 mV, 0-500 mV, 0-1 V 0-20 V, 2-10 V, 0-5 mA, 0-10 mA 2-10 V, 0-5 mA, 0-10 mA 0-20mA, 4-20 mA, +-5 mA, +-20 mA output: 0 - 10 V, 0/4 - 20 mA screw terminal

product brand name	SIRIUS
product category	Signal converter
product designation	universal converter
design of the product	active, switchable
product type designation	3RS70
General technical data	
display version LED	Yes
number of channels	1
consumed active power	0.5 W
insulation voltage for overvoltage category III according to IEC 60664	
• with degree of pollution 3 rated value	300 V
surge voltage resistance rated value	4 000 V
protection class IP	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
reference code acc. to IEC 81346-2	T
Supply voltage	
supply voltage at AC	
• at 50 Hz rated value	24 ... 240 V
• at 60 Hz rated value	24 ... 240 V
supply voltage at DC rated value	24 ... 240 V
• supply voltage frequency rated value	60 ... 50 Hz
operating range factor supply voltage rated value	
• at AC at 50 Hz	0.8 ... 1.1
• at AC at 60 Hz	0.8 ... 1.1
• at DC	0.8 ... 1.1
Precision	
relative metering precision	0.1 %
relative linearity deviation	0.05 %
temperature drift per °C	0.015 %/°C
voltage ripple maximum	20 mV
limit frequency	30 Hz
settling time for 1 % deviation	17 ms
rise time	6 ms
Main circuit	
type of voltage	AC/DC


Inputs/ Outputs	
input voltage	30 V
property of the output short-circuit proof	Yes
type of signal at input	0 ... 60 mV, 0 ... 100 mV, 0 ... 300 mV, 0 ... 500 mV, 0 ... 1 V, 0 ... 2 V, 0 ... 5 V, 0 ... 10 V, 0 ... 20 V, 2 ... 10 V, 0 ... 5 mA, 0 ... 10 mA, 0 ... 20 mA, 4 ... 20 mA, +/-5 mA, +/-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"> at voltage output minimum at the current output maximum 	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"> 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-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"> between input and output between the outputs between the inputs between the voltage supply and other circuits 	Yes No No Yes
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 cables solid 	1x (0.25 ... 2.5 mm ²) 1x (0.25 ... 1.5 mm ²) 1 x (20 ... 14)
<ul style="list-style-type: none"> connectable conductor cross-section solid connectable conductor cross-section finely stranded with core end processing 	0.25 ... 2.5 mm ² 0.25 ... 1.5 mm ²
<ul style="list-style-type: none"> AWG number as coded connectable conductor cross section solid 	20 ... 14
<ul style="list-style-type: none"> 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	17.5 mm
depth	72.5 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 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 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
• ambient temperature during storage	-40 ... +80 °C
• ambient temperature during transport	-40 ... +80 °C
relative humidity during operation	10 ... 95 %

Certificates/ approvals

General Product Approval	Declaration of Conformity	Test Certificates
   	Miscellaneous	Type Test Certificates/Test Report

Marine / Shipping	other
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[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=3RS7006-1FW00>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7006-1FW00>

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

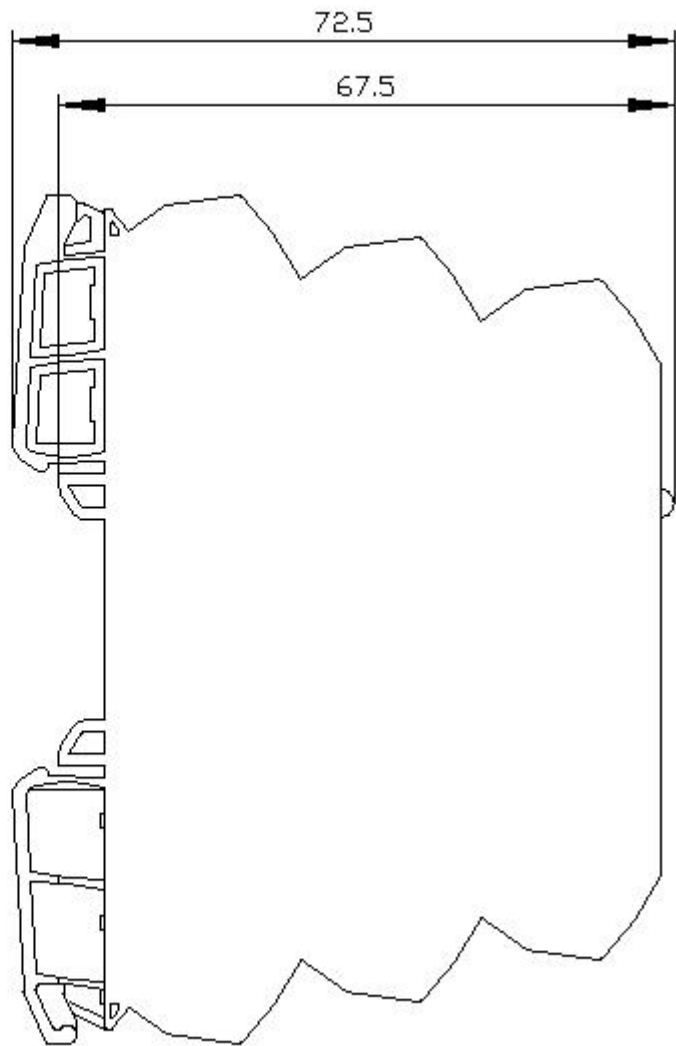
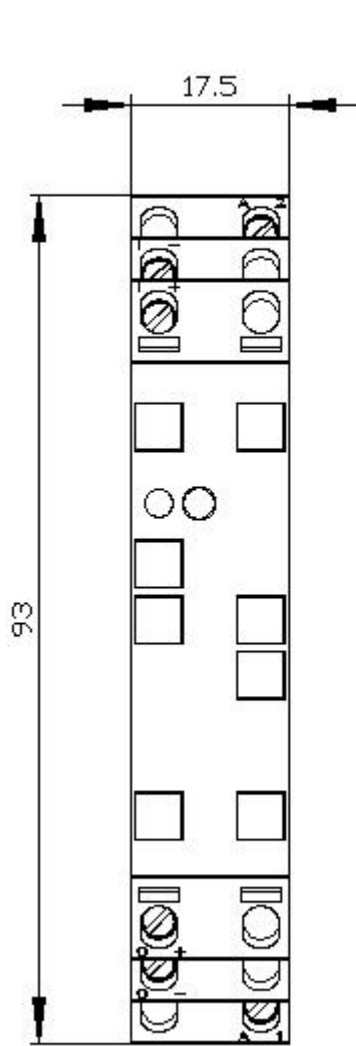
<https://support.industry.siemens.com/cs/ww/en/ps/3RS7006-1FW00>

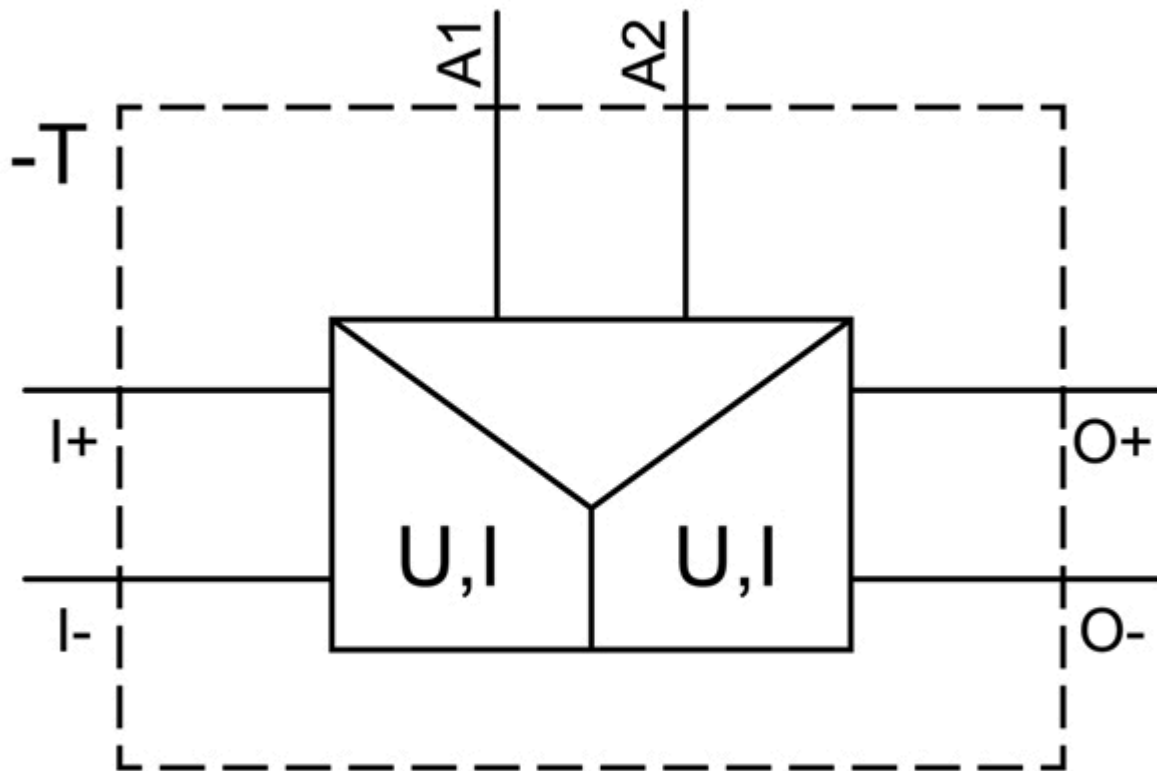
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RS7006-1FW00&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RS7006-1FW00/manual>





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