



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 DIN EN 81346-2	T
Reference code acc. to DIN EN 61346-2	K
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	
Load	
• at voltage output minimum	2 kΩ
• at the current output maximum	500 Ω
Electromagnetic compatibility	
EMC emitted interference	
• acc. to IEC 60947-1	Environment B
EMI immunity	
• acc. to IEC 60947-1	corresponds to degree of severity 3

Conducted interference	
• due to burst acc. to IEC 61000-4-4	1 kV 5/50 ns
• due to conductor-conductor surge acc. to IEC 61000-4-5	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	3 paths
Galvanic isolation	
• between entrance and outlet	Yes
• between the outputs	No
• between the inputs	No
• between the voltage supply and other circuits	Yes

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)
• at AWG conductors 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
Mounting type	snap-on mounting
Height	93 mm
Width	17.5 mm
Depth	72.5 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
Relative humidity	
• during operation	10 ... 95 %

Certificates/ approvals

General Product Approval	Declaration of Conformity	Test Certificates
 CSA	 UL	 EAC
	 EG-Konf.	Miscellaneous Type Test Certificates/Test Report

Marine / Ship- ping	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=3RS7006-1FW00>

Cax online generator

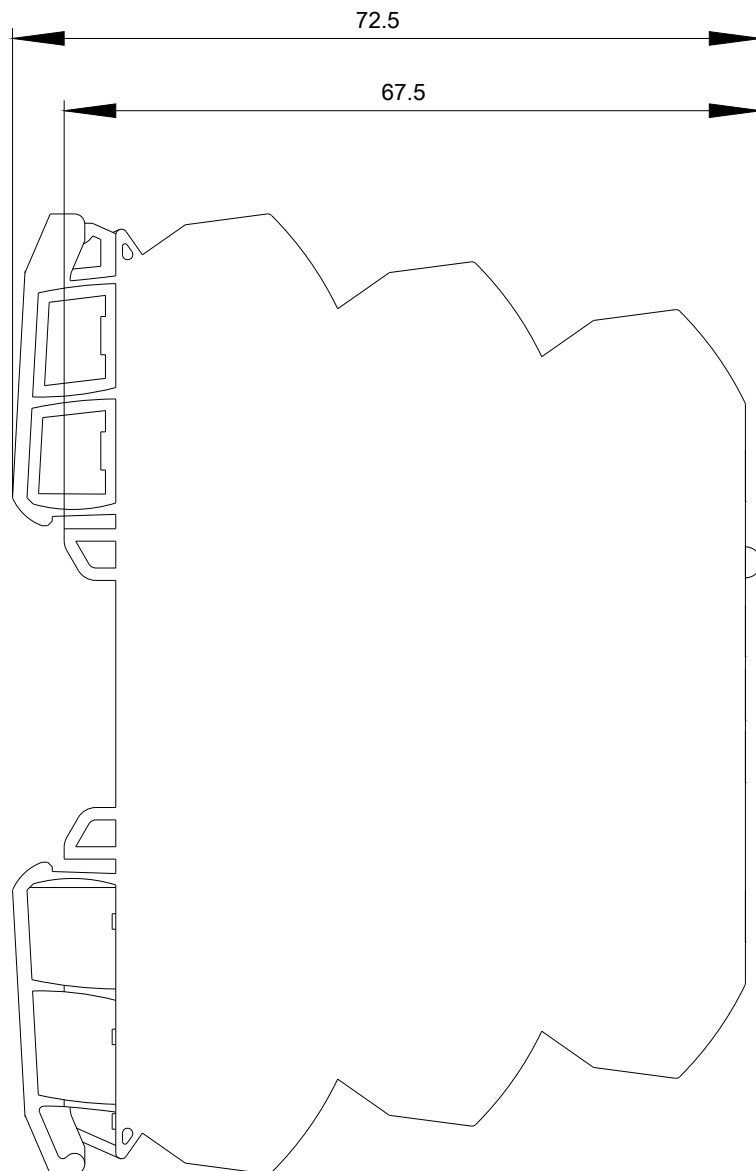
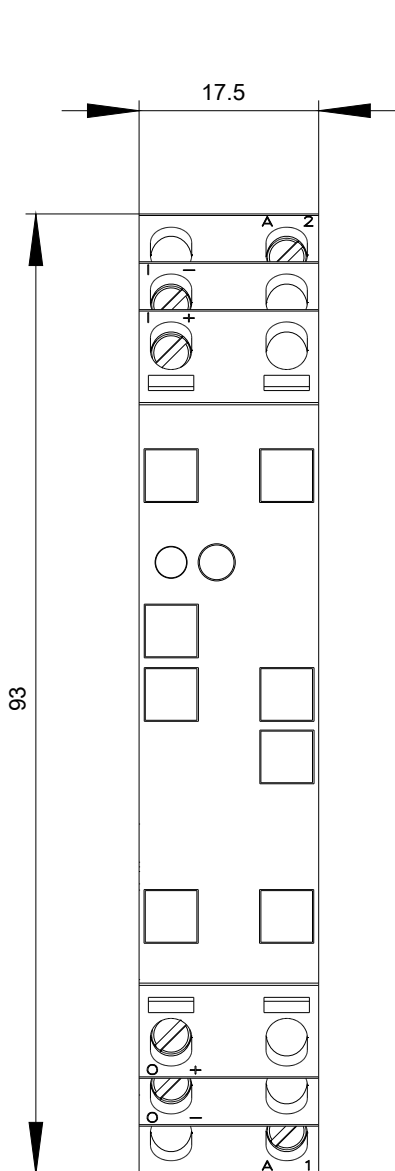
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7006-1FW00>

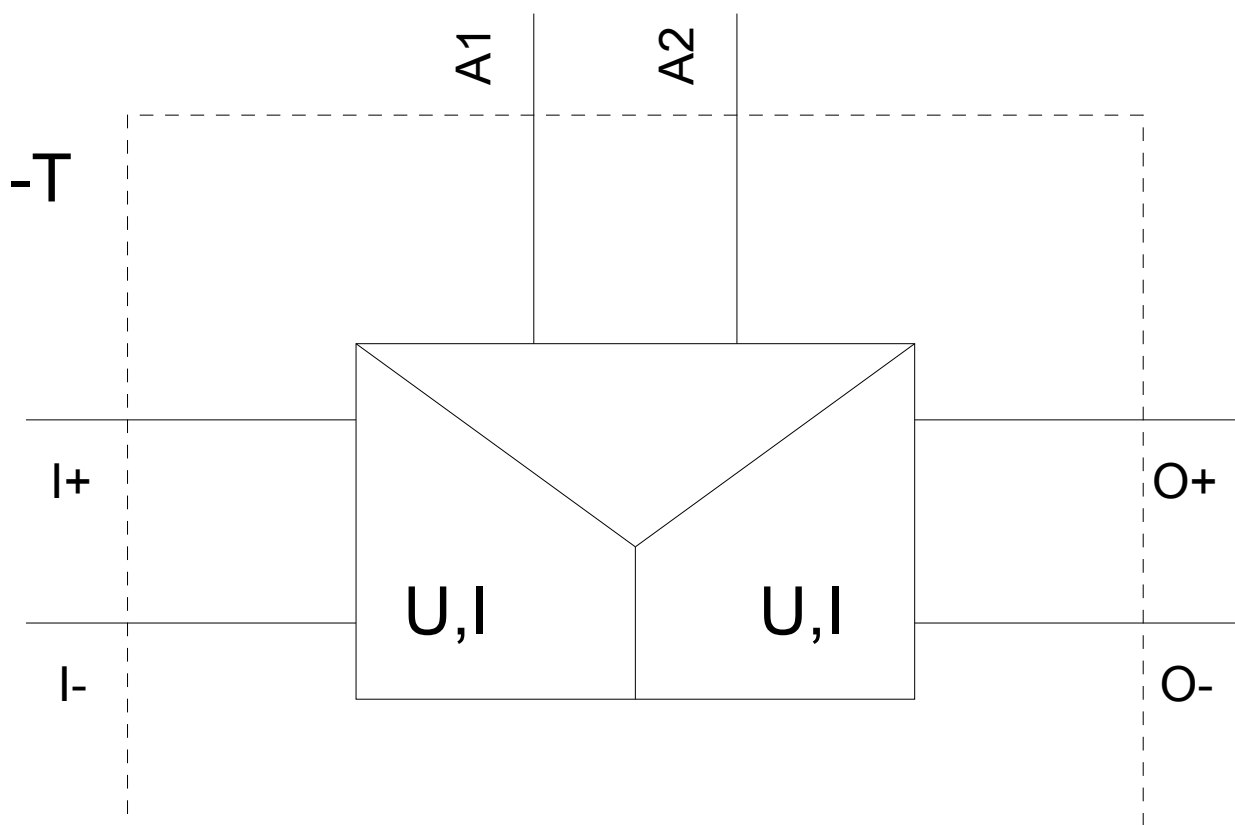
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<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





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