



Separation amplifier 24 V AC/DC, 3-way separation input: 0-60 mV, 0-100 mV 0-300 mV, 0-500 mV, 0-1 V 0-2 V, 0-5 V, 0-10 mA, 0-20 V 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	50 V
surge voltage resistance rated value	4 000 V
shock resistance according to IEC 60068-2-27	sinusoidal half-wave 15 g / 11 ms
vibration resistance according to IEC 60068-2-6	6 ... 150 Hz: 2 g
reference code according to IEC 81346-2	T
Substance Prohibittance (day/month/year)	03/25/2015
Net Weight	0.074 kg
Supply voltage	
supply voltage at AC	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
supply voltage at DC rated value	24 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 maximum	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
output load	
• at voltage output minimum	2 kΩ
• at the current output maximum	500 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	3 paths
galvanic isolation	
• between input and output	Yes
• between the outputs	No
• between the inputs	No
• between the voltage supply and other circuits	Yes
Connections/ Terminals	
type of electrical connection	screw terminal
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	1x (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	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
ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
relative humidity during operation	10 ... 95 %

Approvals Certificates

Environment	General Product Approval
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[Environmental Con-
firmations](#)



EMV	Test Certificates	Maritime application	other
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[Type Test Certificates/Test Report](#)



[Confirmation](#)



Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RS7006-1FE00>

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7006-1FE00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RS7006-1FE00>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RS7006-1FE00&lang=en



