SIEMENS

Data sheet

3RS7005-1FE00



Separation amplifier 24 V AC/DC, 3-way separation input: 0-10 V, 0/4-20 mA output: 0-10 V, 0/4-20 mA screw terminal

product brand name	SIRIUS
product category	Signal converter
product designation	multi-range converters
design of the product	active, switchable
product type designation	3RS70
General technical data	
display version LED	Yes
number of channels	1
consumed active power	0.29 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	2 500 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	Т
Substance Prohibitance (Date)	03/25/2015
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	30 V

property of the output short-circuit proof	Yes		
type of signal at input	0 10 V, 0 20 mA, 4 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-type terminals		
type of connectable conductor cross-sections			
• solid	1x (0.25 2.5 mm²)		
 finely stranded with core end processing 	1x (0.25 1.5 mm²)		
at 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 mm²		
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 required spacing	72.5 mm		
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		

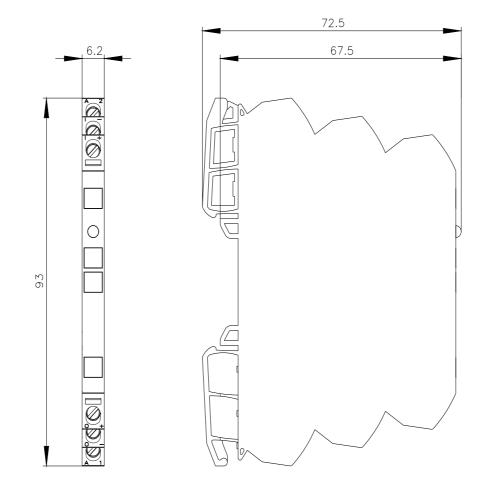
— downwards	0 mm	0 mm			
— at the side	0 mm	0 mm			
Ambient conditions					
installation altitude at height above sea level maximum	2 000 m	2 000 m			
ambient temperature					
 during operation 	-25 +60 °C	-25 +60 °C			
 during storage 	-40 +80 °C				
during transport	-40 +80 °C	-40 +80 °C			
relative humidity during operation	10 95 %	10 95 %			
Certificates/ approvals					
General Product Approval		Declaration of Conformity	Test Certificates		
Confirmation Confirmation) EHC	CE EG-Konf.	<u>Type Test Certific-</u> ates/Test Report		
Marine / Shipping other					
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=3RS7005-1FE00 Cax online generator					

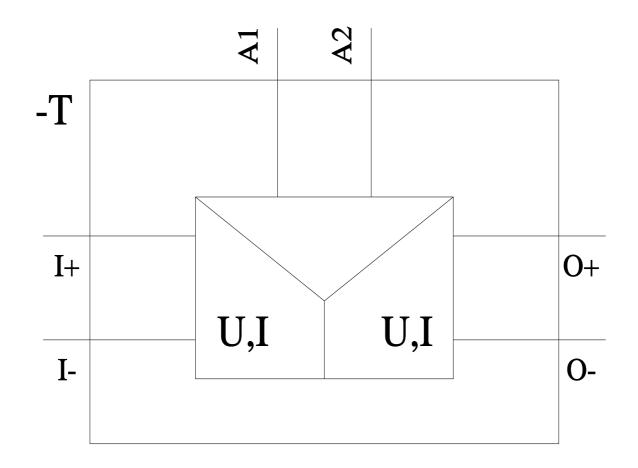
Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7005-1FE00

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RS7005-1FE00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RS7005-1FE00&lang=en **Characteristic: Derating**

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