SIEMENS

Data sheet 3RS7003-2AE00



SIGNAL CONVERTER 24 V AC/DC, 3-WAY ISOLATION IN: 4 TO 20 MA OUT: 0 TO 10 V SPRING-TYPE TERMINAL

Figure similar

product brandname	SIRIUS
Product designation	Single-range converters
Design of the product	Single-range converters, active

General technical data		
Consumed active power	W	0.29
Insulation voltage for overvoltage category III according to IEC 60664		
 with degree of pollution 3 rated value 	V	50
Type of voltage		AC/DC
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
Surge voltage resistance rated value	V	2 500
Protection class IP		IP20
Equipment marking		
• acc. to DIN EN 81346-2		Т
• acc. to DIN EN 61346-2		Κ
Display version LED		Yes
Relative metering precision	%	0.1

Relative linearity deviation	%	0.05
Temperature drift per °C	%/°C	0.015
Number of channels		1
Voltage ripple maximum	mV	20
Limit frequency	Hz	30
Settling time for 1 % deviation	ms	17
Rise time	ms	6

Inputs/ Outputs		
Type of signal at input		4 20 mA
Input voltage		
• maximum	V	30
Type of signal at output		0 10 V
Property of the output Short-circuit proof		Yes
Load		
 at voltage output maximum 	kΩ	2

Supply voltage			
Supply voltage			
• at AC at 50 Hz rated value	V	24 24	
• at AC at 60 Hz rated value	V	24 24	
• at DC rated value	V	24 24	
Supply voltage frequency rated value	Hz	50 60	
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	

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
Field-bound parasitic coupling acc. to IEC 61000-4-3	0.8 1 GHz 10 V/m, 1.4 2 GHz 3 V/m, 2 2.7 GHz 1 V/m
Conducted interference	
 due to conductor-conductor surge acc. to IEC 61000-4-5 	1 kV
• due to burst acc. to IEC 61000-4-4	1 kV 5/50 ns
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		spring-loaded 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)
 finely stranded without core end processing 		1x (0.25 2.5 mm²)
 at AWG conductors solid 		1 x (20 14)
 at AWG conductors stranded 		1x (20 14)
Connectable conductor cross-section		
• solid	mm²	0.25 2.5
 finely stranded with core end processing 	mm²	0.25 1.5
• finely stranded without core end processing	mm²	0.25 2.5
AWG number as coded connectable conductor cross		
section		
• stranded		20 14
• solid		20 14

Installation/ mounting/ dimensions			
Mounting position		any	
Mounting type		snap-on mounting	
Height	mm	93	
Width	mm	6.2	
Depth	mm	72.5	
Required spacing			
with side-by-side mounting			
— forwards	mm	0	
— Backwards	mm	0	
— upwards	mm	0	
— downwards	mm	0	
— at the side	mm	0	
• for grounded parts			
— forwards	mm	0	
— Backwards	mm	0	
— upwards	mm	0	
— downwards	mm	0	
— at the side	mm	0	
• for live parts			
— forwards	mm	0	
— Backwards	mm	0	
— upwards	mm	0	
— downwards	mm	0	

Ambient conditions		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
during operation	°C	-25 +60
during storage	°C	-40 + 80
during transport	°C	-40 + 80

%

mm

0

10 ... 95

Further information

- at the side

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

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

Relative humidity during operation

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RS7003-2AE00

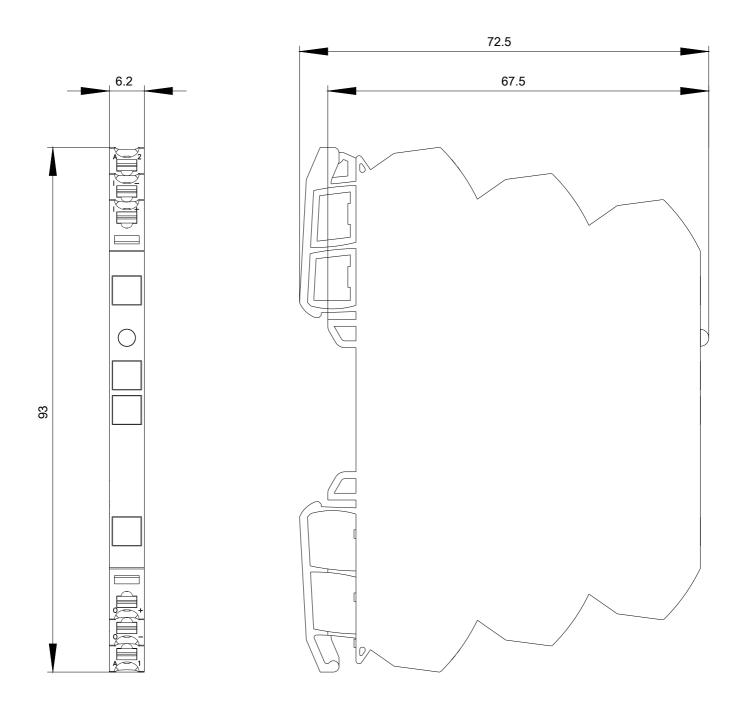
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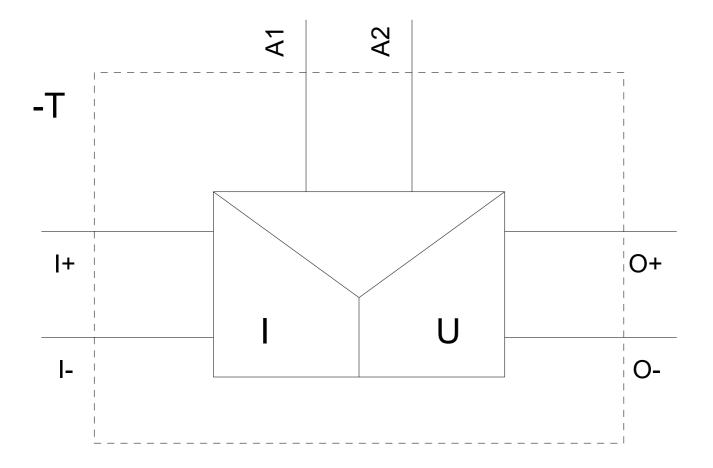
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS7003-2AE00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RS7003-2AE00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RS7003-2AE00&lang=en





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