# SIEMENS

# Product data sheet

## 3RS1700-2DE00



INTERFACE CONVERTER AC/DC 24 V, 3 WAY SEPARATION ON: 0 TO 10 V OFF: 4 TO 20 MA CAGE CLAMP

General technical details:				
product brand name		SIRIUS		
product designation		single interface converter		
Design of the base unit		active		
Number of channels		1		
Ambient temperature				
during operating	°C	-25 +60		
during transport	°C	-40 +85		
during storage	°C	-40 +85		
Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 2 / rated value	V	50		
Recorded real power	W	0.3		
Protection class IP		IP20		
Resistance against vibration / according to IEC 60068-2-6		10 55 Hz: 0.35 mm		
Resistance against shock / according to IEC 60068-2-27		15g / 11 ms		
Item designation / according to DIN EN 61346-2		К		
Item designation / according to DIN 40719 extendable after IEC 204- 2 / according to IEC 750		К		
Connections:				

Design of the electrical connection

spring-loaded terminals

Design of the electrical isolation         3 paths           Galvanic isolation         3 paths           • between entrance and outlet         Yes           • between the voltage supply and other circuits         Yes           Supply voltage:         Xer           Supply voltage frequency         AC/DC           • rated value         Hz         50 60           Supply voltage         - 60           • rated value         V         24 24           • rated value         V         28 1.2           • rated value         V         28 1.2           • rated value         V         30 1.2	The state of the second state is a second state of the second state is a second state of the second state		
• finely stranded / with wire end processing       2x (0.515 mm <sup>2</sup> )         • for AWG conductors       2x (2016)         • stranded       3 paths         Calvaric isolation:       3 paths         Calvaric isolation:       Yes         • between entrance and outlet       Yes         • between entrance and outlet       Yes         • between the voltage supply and other circuits       AC/DC         Supply voltage       AC/DC         Supply voltage frequency       HZ         • rated value       V         • at 50 Hz / for AC       V         • rated value       V       24 24         • at 60 Hz / for AC       V       24 24         • at 60 Hz / for AC       V       24 24         • at 60 Hz / for AC       V       24 24         • at 60 Hz / for AC       V       24 24         • at 60 Hz / for AC       V       24 24         • for DC       V       24 24         • at 60 Hz / for AC       V       24 24         • at 60 Hz / for AC       0.8 1.2       0.8 1.2         • for DC       V       24 24       24         • for DC       V       30       30			
• isr AVG conductors     i     i       • stranded     i     i       Galvanic isolation:     i     i       Galvanic isolation:     i     i       Galvanic isolation:     i     i       • between entrance and outlet     i     i       • at 50 Hz / for AC     i     i       • at 60 Hz / for AC     i     i       • at 60 Hz / for AC     i     i       • at 60 Hz / for AC     i     i       • at 60 Hz / for AC     i     i       • at 60 Hz / for AC     i     i       • at 60 Hz / for AC     i     i       • for DC     i     i			
• stranded       ≥x (20 16)         Celvanic isolation       3 paths         Galvanic isolation       1       3 paths         Galvanic isolation       1       4         • between entrance and outlet       1       5         • between the voltage supply and other circuits       Ves       5         Supply voltage       1       6         Supply voltage frequency       1       6         • rated value       1       5       0         • rated value       V       24       24       24         • rated value       V       24       24       24         • rated value       V       24			2x (0.5 1.5 mm²)
Galvanic isolation:         3 paths           Design of the electrical isolation         3 paths           Galvanic isolation         Ves           • between the voltage supply and other circuits         Ves           Supply voltage:         Ves           Supply voltage frequency         AC/DC           • rated value         Hz         50 60           Supply voltage frequency         V         24 24           • rated value         V         38	for AWG conductors		
Design of the electrical isolation         3 paths           Gelvanic isolation         Ves           • between ntrance and outlet         Ves           • between the voltage supply and other circuits         Ves           Supply voltage:         Ves           Supply voltage frequency         AC/DC           • rated value         HZ         50 60           Supply voltage frequency         HZ         50 60           • rated value         V         24 24           • at 50 Hz / for AC         V         24 24           • rated value         V         24 24           • at 60 Hz / for AC         V         24 24           • rated value         V         24 24           • for DC         08 12         0.0.000000000000000000000000000000000	• stranded		2x (20 16)
Galaranic isolation         Setween entrance and outlet         Yes           • between the voltage supply and other circuits         Yes           Supply voltage:         Yes           Supply voltage frequency         AC/DC           • rated value         Hz         50 60           Supply voltage	Galvanic isolation:		
• between the voltage supply and other circuits       Yes         Supply voltage:       AC/DC         Supply voltage frequency       AC/DC         • rated value       Hz       50 60         Supply voltage       -       -         • rated value       V       4       -         • rated value       V       24 24       -         • rated value       V       28 1.2       -         • rated value       V       30       -         • rated value       V       30       -         • ra	Design of the electrical isolation		3 paths
v between the voitage supply and other circuits         Yes           Supply voitage         AC/DC           Supply voitage frequency         AC/DC           · rated value         Hz         50 60           Supply voitage	Galvanic isolation		
Supply voltage         AC/DC           Supply voltage frequency         AC/DC           · rated value         Hz         50 60           Supply voltage	between entrance and outlet		Yes
type of voltage         AC/DC           Supply voltage frequency         - rated value           • rated value         Hz         50 60           Supply voltage	between the voltage supply and other circuits		Yes
interd value       Hz       50 60         Supply voltage       Hz       50 60         st 50 Hz / for AC       V       24 24         • rated value       V       24 24         • for DC       V       24 24         • for DC       V       24 24         • rated value       V       24 24         • for DC       V       24 24         • for DC       V       24 24         • at 60 Hz / for AC       0.8 1.2       0.8 1.2         • at 60 Hz / for AC       0.8 1.2       0.7 1.25         Inputs:       Util frequency       Hz       30         Input voltage / maximum       V       30       10         Input voltage / typical       V       24       24         Outputs:       V       30       10         Surder / at the current output / maximum       Ω       400       10         Characteristic feature of the output / short-circuit protected       Ye s       Ye s       10         Overvoltage strength	Supply voltage:		
· rated valueHz50 60Supply voltage· at 50 Hz / for AC· rated valueV24 24· at 60 Hz / for ACV24 24· rated valueV24 24· for DC· rated valueV24 24· rated valueV24 24Working range factor supply voltage rated valueV24 24· rated valueV24 24Working range factor supply voltage rated value0.8 1.2· at 50 Hz / for AC0.8 1.2· at 60 Hz / for AC0.8 1.2· bruts0.7 1.25Input voltage / maximumVInput voltage / maximumVInput voltage / typicalVOutputs:24Surden / at the current output / maximumΩInput of signalV· secondary sideV· secondary side-· secondary side-· at the input-· secondary side-· at the input-· at the	type of voltage		AC/DC
Supply voltage         Image: Supply voltage           • at 50 Hz / for AC         V         24 24           • at 60 Hz / for AC         V         24 24           • at 60 Hz / for AC         V         24 24           • for DC         V         24 24           • at 60 Hz / for AC         0.8 1.2           • at 50 Hz / for AC         0.8 1.2           • at 60 Hz / for AC         0.8 1.2           • for DC         0.7 1.25           Inputs:         V         30           Input voltage / maximum         V         30           Input voltage / typical         V         30           Outputs:         V         30           Burden / at the current output / maximum         Ω         400           Characteristic feature of the output / maximum         V         30           Type of signal         V         30           • secondary side         4 20 mA         10 V	Supply voltage frequency		
• at 50 Hz / for AC       V       24 24         • at 60 Hz / for AC       V       24 24         • at 60 Hz / for AC       V       24 24         • for DC       V       24 24         • rated value       V       24 24         • for DC       V       24 24         • rated value       V       24 24         Working range factor supply voltage rated value       V       24 24         • at 50 Hz / for AC       0.8 1.2       0.8 1.2         • at 50 Hz / for AC       0.8 1.2       0.8 1.2         • for DC       0.7 1.25       0.7 1.25         Input voltage / maximum       V       30         Input voltage / maximum       V       30         Input voltage / typical       V       24         Outputs:       V       30         Burden / at the current output / maximum       Ω       400         Characteristic feature of the output / short-circuit protected       Ves         Overvoltage strength / at the current output / maximum       Ω       420 mA         • secondary side       420 mA      10 V	rated value	Hz	50 60
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• at 60 Hz / for ACV24 24• for DCV24 24• for DCV24 24• at dvalueV24 24Working range factor supply voltage rated valueV24 24• at 50 Hz / for AC0.8 1.20.8 1.2• at 60 Hz / for AC0.8 1.20.8 1.2• at 60 Hz / for AC0.7 1.250.7 1.25Inputs:Hz30Input voltage / maximumV30Input voltage / maximumV24Outputs:V24Outputs:V24Dutput site feature of the output / maximumΩ400Characteristic feature of the output / short-circuit protectedYesOvervoltage strength / at the current output / maximumV30Type of signalV30• secondary side4 20 mA• at the input0 10 V	• at 50 Hz / for AC		
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· for DC · rated valueV24 24Working range factor supply voltage rated value · at 50 Hz / for AC · at 60 Hz / for AC · for DC0.8 1.2 0.8 1.2 0.7 1.25Inputs:0.8 1.2 0.7 1.25Limft frequency Input voltage / maximumHz30Input voltage / maximum Input voltage / typicalV30Outputs:V24Outputs:V24Durbus:V30Outputs:V24Durbus:V24Outputs:V30Durbus:V30Outputs:V30Durbus:V <td>• at 60 Hz / for AC</td> <td></td> <td></td>	• at 60 Hz / for AC		
· rated valueV24 24Working range factor supply voltage rated value· at 50 Hz / for AC0.8 1.20.8 1.2· at 60 Hz / for AC0.8 1.20.8 1.2· for DC0.7 1.250.7 1.25Inputs:Hz30Input voltage / maximumV30Input voltage / typicalV24Outputs:V24Outputs:V24Durden / at the current output / maximumΩ400Characteristic feature of the output / short-circuit protectedV30Type of signal • secondary side • at the inputV30Type of signal • at the inputV30	rated value	V	24 24
Working range factor supply voltage rated value <ul> <li>at 50 Hz / for AC</li> <li>bt 2 / for AC</li> <li>ct 60 Hz / for AC</li> <li>bt 2 / for AC</li> <li>ct 60 Hz / for AC</li> <li>ct 70 Hz</li> <li>ct 70 Hz</li> <li>dt 70 Hz</li></ul>	• for DC		
• at 50 Hz / for AC0.8 1.2• at 60 Hz / for AC0.8 1.2• for DC0.7 1.25Inputs:Limit frequencyHz30Input voltage / maximumV1nput voltage / maximumV24Outputs:Burden / at the current output / maximumΩ400Characteristic feature of the output / short-circuit protectedV30Overvoltage strength / at the current output / maximumΩ400Type of signal • secondary side • at the inputV30	rated value	V	24 24
• at 60 Hz / for AC0.8 1.2• for DC0.7 1.25Inputs:Limit frequencyHz30Input voltage / maximumV30Input voltage / typicalV24Outputs:Burden / at the current output / maximumΩ400Characteristic feature of the output / short-circuit protectedYesOvervoltage strength / at the current output / maximumV30Type of signal • secondary side • at the inputV30	Working range factor supply voltage rated value		
• for DC0.7 1.25Inputs:Hz30Limit frequencyHz30Input voltage / maximumV30Input voltage / typicalV24Outputs:Burden / at the current output / maximumΩ400Characteristic feature of the output / short-circuit protectedY30Overvoltage strength / at the current output / maximumV30Type of signal • secondary side • at the inputU30	• at 50 Hz / for AC		0.8 1.2
Inputs:       Hz       30         Input voltage / maximum       V       30         Input voltage / typical       V       24         Outputs:       V       24         Burden / at the current output / maximum       Ω       400         Characteristic feature of the output / short-circuit protected       Yes         Overvoltage strength / at the current output / maximum       V       30         Type of signal       v       30         • secondary side       4 20 mA       10 V	• at 60 Hz / for AC		0.8 1.2
Limit frequencyHz30Input voltage / maximumV30Input voltage / typicalV24Outputs:Burden / at the current output / maximumΩ400Characteristic feature of the output / short-circuit protectedYesOvervoltage strength / at the current output / maximumV30Type of signal • secondary side • at the input4 20 mA	• for DC		0.7 1.25
Input voltage / maximumV30Input voltage / typicalV24Outputs:	Inputs:		
Input voltage / typical       V       24         Outputs:       Burden / at the current output / maximum       Ω       400         Characteristic feature of the output / short-circuit protected       Yes       Yes         Overvoltage strength / at the current output / maximum       V       30         Type of signal       4 20 mA       0 10 V	Limit frequency	Hz	30
Outputs:       Ω       400         Characteristic feature of the output / maximum       Ω       Yes         Overvoltage strength / at the current output / maximum       V       30         Type of signal       4 20 mA       0 10 V	Input voltage / maximum	V	30
Burden / at the current output / maximum       Ω       400         Characteristic feature of the output / short-circuit protected       Yes         Overvoltage strength / at the current output / maximum       V       30         Type of signal       - secondary side       4 20 mA         • at the input       0 10 V       - 10 V	Input voltage / typical	V	24
Characteristic feature of the output / short-circuit protected       Yes         Overvoltage strength / at the current output / maximum       V       30         Type of signal       - secondary side       4 20 mA         • at the input       0 10 V       - 10 V	Outputs:		
Overvoltage strength / at the current output / maximum       V       30         Type of signal <ul> <li>secondary side</li> <li>at the input</li> <li>U</li> </ul> 4 20 mA           0 10 V	Burden / at the current output / maximum	Ω	400
Type of signal     4 20 mA       • secondary side     0 10 V	Characteristic feature of the output / short-circuit protected		Yes
<ul> <li>secondary side</li> <li>at the input</li> <li>0 10 V</li> </ul>	Overvoltage strength / at the current output / maximum	V	30
• at the input 0 10 V	Type of signal		
	secondary side		4 20 mA
Precision:	• at the input		0 10 V
	Precision:		

Relative metering precision	%	0.1
Relative linearity deviation	%	0.02
Temperature drift per °C	%/°C	0.015
Rise time	ms	10
Settling time / for 1 % conformity error	ms	30
Ripple of voltage / maximum	mV	5

## Installation/mounting/dimensions:

-		
Type of mounting		snap-on mounting on 35 mm DIN rail according to DIN EN 50022
mounting position		any
Height	mm	90
Width	mm	6.2
Depth	mm	92.5

# Certificates/approvals:

General Product Approval Test Certificates



Special Test Certificate

Declaration of Conformity

other

## Further information:

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

### Industry Mall (Online ordering system)

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

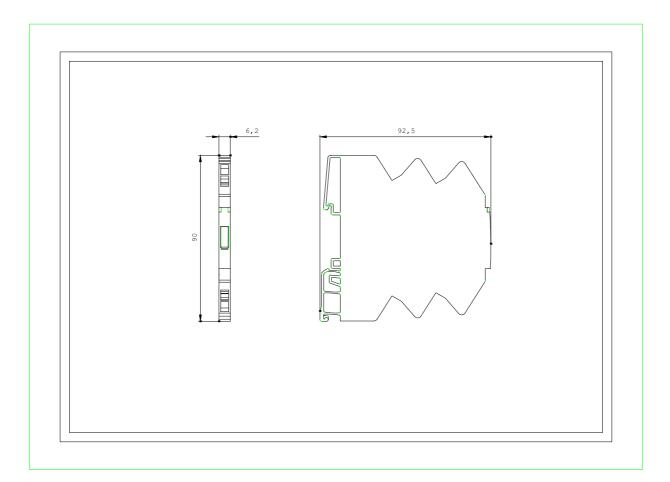
#### CAx-Online-Generator

http://www.siemens.com/cax

#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RS1700-2DE00/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RS1700-2DE00





last change:

Feb 11, 2013