## SIEMENS

## Data sheet

## 3UG4501-1AA30



Analog monitoring relay Fill level monitoring Resistance monitoring from 2 to 200 kohm 0vershoot and undershoot Supply voltage 24 V AC/DC 50 to 60 Hz DC and AC without galvanic isolation to measuring circuit 2-step or 1-step control Tripping delay 0.5 to 10 s 1 change-over contact screw terminal Successor product for 3UG3501-1AC20

product brand name         SIRIUS           product designation         Level monitoring relay with analog setting           manufacturer's article number of the optional sensor         2-pole and 3-pole sensors 3UG3207           Ceneral technical data         monitoring relay for level monitoring           diplay version LED         Yes           • Apparent power consumption at DC         - at 24 V maximum           - at 24 V maximum         2 VA           • apparent power consumption at AC         - at 24 V maximum           - at 24 V maximum         2 VA           • apparent power consumption at AC         - at 24 V maximum           - at 24 V maximum         2 VA           insulation voltage         300 V           • of the control supply voltage         AC/DC           • super seistance according to IEC 60068-2-27         sinusoidal half-wave 15g / 11 ms           vibration relatance (operating cycles) typical         100 000           electrical andurance (operating cycles) typical         100 000           electrical andurance (operating cycles) typical         100 000           soutet monitoring adjustable         Yes <th></th> <th></th>		
product type designation manufacturer's article number of the optional sensor     3UG4 2-pole and 3-pole sensors 3UG3207       charaft technical data     Monitoring relay for level monitoring       product function     Monitoring relay for level monitoring       display version LED     Yes       • Apparent power consumption at DC — at 24 V maximum     2 VA       • apparent power consumption at AC — at 24 V maximum     2 VA       • apparent power consumption at AC — at 24 V maximum     2 VA       • apparent power consumption at AC — at 24 V maximum     2 VA       • of or overvoltage category III according to IEC 60664 with degree of pollution 3 rated value     300 V       type of voltage     AC/DC       • of the control supply voltage     AC/DC       surge voltage resistance rated value     1P20       protection class IP     Product function       vibration resistance according to IEC 60068-2-27     sinusoidal half-wave 15g / 11 ms       vibration resistance according to IEC 60068-2-27     sinusoidal half-wave 15g / 11 ms       vibration resistance according to IEC 60068-2-27     sinusoidal half-wave 15g / 11 ms       vibration resistance according to IEC 60068-2-27     sinusoidal half-wave 15g / 11 ms       vibration resistance according to IEC 60068-2-27     sinusoidal half-wave 15g / 11 ms       vibration resistance according to IEC 60068-2-27     sinusoidal half-wave 15g / 11 ms       vibration resistance accordin	product brand name	SIRIUS
manufacturer's article number of the optional sensor     2-pole and 3-pole sensors 3UG3207       Ceneral tochnical data     monitoring relay for level monitoring       product function     Monitoring relay for level monitoring       display version LED     Yes       • Apparent power consumption at DC		Level monitoring relay with analog setting
General tochnical data       Monitoring relay for level monitoring         product function       Monitoring relay for level monitoring         display version LED       Yes         • Apparent power consumption at DC       2 VA         at 24 V maximum       2 VA         • apparent power consumption at AC	product type designation	3UG4
product function     Monitoring relay for level monitoring       display version LED     Yes       • Apparent power consumption at DC     - at 24 V maximum       - at 24 V maximum     2 VA       • apparent power consumption at AC     - at 24 V maximum       - at 24 V maximum     2 VA       insulation voltage     300 V       • for overvoltage category III according to IEC 60664 with degree of pollution     300 V       type of voltage     AC/DC       • of the control supply voltage     AC/DC       surge voltage resistance rated value     4 kV       protection class IP     sinusoidal half-wave 15g / 11 ms       shock resistance according to IEC 60068-2-27     sinusoidal half-wave 15g / 11 ms       vibration resistance according to IEC 60068-2-6     1 6 Hz: 15 mm, 6 500 Hz: 2g       mechanical service life (operating cycles) typical     10000 000       electrical endurance (operating cycles) typical     10000 000       electrical endurance (operating cycles) typical     10000 000       10000 000     500 Hz: 2g       product function     Yes       relative repeat accuracy     1 %       Substance Prohibitance (Date)     05/01/2012       Product function     Yes       • adjustable     Yes       • adjustable responsiveness     Yes       • atted value     2	manufacturer's article number of the optional sensor	2-pole and 3-pole sensors 3UG3207
display version LED       Yes            • Apparent power consumption at DC 	General technical data	
<ul> <li>Apparent power consumption at DC         <ul> <li>at 24 V maximum</li> <li>2 VA</li> </ul> </li> <li>apparent power consumption at AC             <ul> <li>at 24 V maximum</li> <li>2 VA</li> </ul> </li> <li>apparent power consumption at AC         <ul> <li>at 24 V maximum</li> <li>2 VA</li> </ul> </li> <li>apparent power consumption at AC         <ul> <li>at 24 V maximum</li> <li>2 VA</li> </ul> </li> <li>apparent power consumption at AC         <ul> <li>at 24 V maximum</li> <li>2 VA</li> </ul> </li> <li>insulation voltage</li> <li>or or vervoltage category III according to IEC 60664</li> <li>300 V</li> <li>with degree of pollution 3 rated value</li> <li>4 KV</li> <li>type of voltage</li> <li>AC/DC</li> <li>struge voltage resistance rated value</li> <li>4 KV</li> <li>protection class IP</li> <li>IP20</li> </ul> <li>shock resistance according to IEC 60068-2-27</li> <li>sinusoidal haft-wave 15g / 11 ms</li> <li>to 000 000</li> <li>electrical endurance (operating cycles) typical</li> <li>100 000 000</li> <li>electrical endurance (operating cycles) typical</li> <li>100 000</li> <li>electrical endurance (Date)</li> <li>ofor / 2012</li> <li>Product function</li> <li>electrical endurance (Date)</li> <li>Product function</li> <li>electrical beliable responsiveness</li> <li>ves</li> <li>eliable responsiveness</li> <li>ves</li> <li>control</li>	product function	Monitoring relay for level monitoring
	display version LED	Yes
	<ul> <li>Apparent power consumption at DC</li> </ul>	
<ul> <li>at 24 V maximum</li> <li>at 24 V maximum</li> <li>2 VA</li> <li>insulation voltage</li> <li>or or vervoltage category III according to IEC 60664 with degree of pollution 3 rated value</li> <li>degree of pollution 3 rated value</li> <li>of the control supply voltage</li> <li>of the control supply voltage</li> <li>of the control supply voltage</li> <li>AC/DC</li> <li>surge voltage resistance rated value</li> <li>type of voltage</li> <li>of the control supply voltage</li> <li>AC/DC</li> <li>surge voltage resistance according to IEC 60068-2-27</li> <li>sinusoidal half-wave 15g / 11 ms</li> <li>binck resistance according to IEC 60068-2-6</li> <li>i 6 Hz: 15 mm, 6 500 Hz: 2g</li> <li>mechanical service life (operating cycles) at AC-15 at</li> <li>230 V typical</li> <li>electrical endurance (operating cycles) at AC-15 at</li> <li>230 V typical</li> <li>reference code according to IEC 81346-2</li> <li>reference code according to IEC 81346-2</li> <li>relative repeat accuracy</li> <li>Substance Prohibitance (Date)</li> <li>05/01/2012</li> <li>Product Function</li> <li>outlet monitoring adjustable</li> <li>ves</li> <li>external reset</li> <li>Yes</li> <li>external reset&lt;</li></ul>		2 VA
insulation voltage     300 V       • for overvoltage category III according to IEC 60664 with degree of pollution     300 V       degree of pollution     3       type of voltage     AC/DC       • of the control supply voltage     AC/DC       surge voltage resistance rated value     4 kV       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     1 6 Hz: 15 mm, 6 500 Hz: 2g       mechanical service life (operating cycles) typical     100 000       electrical endurance (operating cycles) typical     100 000       electrical endurance (operating cycles) typical     100 000       electrical endurance (Date)     05/01/2012       Product Function     05/01/2012       product function     Yes       e adjustable responsiveness     Yes       e intel monitoring adjustable     Yes       e external reset     Yes       e atternal reset     Yes       e atter value     24 24 V       control supply voltage at DC     24 24 V       operating range factor control supply voltage rated     24 24 V	<ul> <li>apparent power consumption at AC</li> </ul>	
• for overvolage category III according to IEC 60664 with degree of pollution 3 rated value         300 V           degree of pollution         3           type of voltage         AC/DC           • of the control supply voltage         AC/DC           surge voltage resistance rated value         4 kV           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         1 6 Hz: 15 mm, 6 500 Hz: 2g           mechanical service life (operating cycles) typical         10 000 000           electrical endurance (operating cycles) at AC-15 at         200 V typical           reference code according to IEC 81346-2         K           relative repeat accuracy         1 %           Substance Prohibitance (Date)         05/01/2012           Product Function	— at 24 V maximum	2 VA
with degree of pollution 3' rated value     3       degree of pollution     3       type of voltage     AC/DC       surge voltage resistance rated value     4 kV       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     1 6 Hz: 15 mm, 6 500 Hz: 2g       mechanical service life (operating cycles) typical     10 000 000       electrical endurance (operating cycles) at AC-15 at     20 V typical       reference code according to IEC 81346-2     K       relative repeat accuracy     1%       Substance Prohibitance (Date)     05/01/2012       Product Function     •       • outlet monitoring adjustable     Yes       • inlet monitoring adjustable     Yes       • external reset     Yes       Control circuit/ Control     24 24 V       • at 60 Hz rated value     24 24 V       • rated value     24 24 V       • rated value     24 24 V	insulation voltage	
type of voltage• of the control supply voltageAC/DCsurge voltage resistance rated value4 kVprotection class IPIP20shock resistance according to IEC 60068-2-27sinusoidal half-wave 15g / 11 msvibration resistance according to IEC 60068-2-61 6 Hz: 15 mm, 6 500 Hz: 2gmechanical service life (operating cycles) typical10 000 000electrical endurance (operating cycles) typical10 000 000electrical endurance (operating cycles) typical100 000reference code according to IEC 81346-2Krelative repeat accuracy1 %Substance Prohibitance (Date)05/01/2012Product functionYes• outlet monitoring adjustableYes• adjustable responsivenessYes• external resetYes• external resetYes• at 50 Hz rated value24 24 V• at 60 Hz rated value24 24 V• rated value24 24 V• operating range factor control supply voltage rated24 24 V• operating range factor control supply voltage rated24 24 V	J J J J J J J J J J J J J J J J J J J	300 V
• of the control supply voltage       AC/DC         surge voltage resistance rated value       4 kV         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       1 6 Hz: 15 mm, 6 500 Hz: 2g         mechanical service life (operating cycles) typical       10 000 000         electrical endurance (operating cycles) at AC-15 at 230 V typical       100 000         reference code according to IEC 81346-2       K         relative repeat accuracy       1 %         Substance Prohibitance (Date)       05/01/2012         Product function       05/01/2012         e outlet monitoring adjustable       Yes         • adjustable responsiveness       Yes         • external reset       Yes         control circuit/ Control       Z4 24 V         • at 50 Hz rated value       24 24 V         • rated value       24 24 V         • rated value       24 24 V         • operating range factor control supply voltage rated       value at DC	degree of pollution	3
surge voltage resistance rated value 4 kV 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 1 6 Hz: 15 mm, 6 500 Hz: 2g mechanical service life (operating cycles) typical 10 000 000 electrical endurance (operating cycles) at AC-15 at 230 V typical reference code according to IEC 81346-2 K relative repeat accuracy 1% Substance Prohibitance (Date) 05/01/2012 Product Function • outlet monitoring adjustable Yes • inlet monitoring adjustable Yes • inlet monitoring adjustable Yes • external reset Yes • control supply voltage at AC • at 50 Hz rated value 24 24 V • at 60 Hz rated value 24 24 V • orated value 24 24 V • orated value 24 24 V • orated value 24 24 V	type of voltage	
protection class IPIP20shock resistance according to IEC 60068-2-27sinusoidal half-wave 15g / 11 msvibration resistance according to IEC 60068-2-61 6 Hz: 15 mm, 6 500 Hz: 2gmechanical service life (operating cycles) typical10 000 000electrical endurance (operating cycles) at AC-15 at 230 V typical100 000reference code according to IEC 81346-2Krelative repeat accuracy1 %Substance Prohibitance (Date)05/01/2012Product FunctionVes• outlet monitoring adjustableYes• adjustable responsivenessYes• external resetYesControl circuit/ Control24 24 V• at 50 Hz rated value24 24 V• rated value24 24 V </th <th><ul> <li>of the control supply voltage</li> </ul></th> <th>AC/DC</th>	<ul> <li>of the control supply voltage</li> </ul>	AC/DC
shock resistance according to IEC 60068-2-27 vibration resistance according to IEC 60068-2-6 mechanical service life (operating cycles) typical electrical endurance (operating cycles) at AC-15 at 230 V typical reference code according to IEC 81346-2 relative repeat accuracy Substance Prohibitance (Date) Product Function • outlet monitoring adjustable • adjustable responsiveness • inlet monitoring adjustable • external reset Control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value • rated value • operating range factor control supply voltage rated value at DC	surge voltage resistance rated value	4 kV
vibration resistance according to IEC 60068-2-61 6 Hz: 15 mm, 6 500 Hz: 2gmechanical service life (operating cycles) typical10 000 000electrical endurance (operating cycles) at AC-15 at 230 V typical100 000areference code according to IEC 81346-2Krelative repeat accuracy1 %Substance Prohibitance (Date)05/01/2012Product FunctionVes• outlet monitoring adjustableYes• adjustable responsivenessYes• inlet monitoring adjustableYes• external resetYesControl supply voltage at AC24 24 V• at 50 Hz rated value24 24 V• at 60 Hz rated value24 24 V• rated value	protection class IP	IP20
mechanical service life (operating cycles) typical10 000 000electrical endurance (operating cycles) at AC-15 at 230 V typical100 000reference code according to IEC 81346-2Krelative repeat accuracy1 %Substance Prohibitance (Date)05/01/2012Product Functionproduct function• outlet monitoring adjustableYes• adjustable responsivenessYes• inlet monitoring adjustableYes• external resetYesControl supply voltage at AC• at 50 Hz rated value24 24 V• at 60 Hz rated value24 24 V• rated value24 24 V	shock resistance according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
electrical endurance (operating cycles) at AC-15 at 230 V typical reference code according to IEC 81346-2 relative repeat accuracy Substance Prohibitance (Date) Product Function • outlet monitoring adjustable • adjustable responsiveness • inlet monitoring adjustable • external reset • external reset Control circuit/ Control control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value • at 60 Hz rated value • rated value • rated value value at DC • control supply voltage rated value at DC	vibration resistance according to IEC 60068-2-6	1 6 Hz: 15 mm, 6 500 Hz: 2g
230 V typical       reference code according to IEC 81346-2       K         relative repeat accuracy       1 %         Substance Prohibitance (Date)       05/01/2012         Product Function       05/01/2012         • outlet monitoring adjustable       Yes         • adjustable responsiveness       Yes         • inlet monitoring adjustable       Yes         • external reset       Yes         Control circuit/ Control       Yes         control supply voltage at AC       24 24 V         • at 50 Hz rated value       24 24 V         • rated value       24 24 V         • rated value       24 24 V	mechanical service life (operating cycles) typical	10 000 000
relative repeat accuracy       1 %         Substance Prohibitance (Date)       05/01/2012         Product Function       •         • outlet monitoring adjustable       Yes         • adjustable responsiveness       Yes         • inlet monitoring adjustable       Yes         • external reset       Yes         Control circuit/ Control       Yes         control supply voltage at AC       24 24 V         • at 50 Hz rated value       24 24 V         • at 60 Hz rated value       24 24 V         • rated value       24 24 V		100 000
Substance Prohibitance (Date)       05/01/2012         Product Function       • outlet monitoring adjustable       Yes         • outlet monitoring adjustable       Yes       • adjustable responsiveness       Yes         • inlet monitoring adjustable       Yes       • external reset       Yes         • external reset       Yes       • external reset       Yes         Control circuit/ Control       • external value       24 24 V         • at 50 Hz rated value       24 24 V       • at 60 Hz rated value       24 24 V         • rated value       24 24 V       • at 60 Hz rated value       24 24 V         • rated value       24 24 V       • at 60 Hz rated value       24 24 V         • rated value       24 24 V       • at 60 Hz rated value       24 24 V         • rated value       24 24 V       • at 60 Hz rated value       24 24 V         • rated value       24 24 V       • at 60 Hz rated value       24 24 V         • rated value       24 24 V       • at 60 Hz rated value       • at 24 V	reference code according to IEC 81346-2	К
Product Function         product function         • outlet monitoring adjustable       Yes         • adjustable responsiveness       Yes         • inlet monitoring adjustable       Yes         • external reset       Yes         Control circuit/ Control       Yes         control supply voltage at AC       Yes         • at 50 Hz rated value       24 24 V         • at 60 Hz rated value       24 24 V         • rated value       24 24 V         • rated value       24 24 V         • at 60 Hz rated value       24 24 V         • at 60 Hz rated value       24 24 V         • rated value       24 24 V	relative repeat accuracy	1 %
product function     Yes       • outlet monitoring adjustable     Yes       • adjustable responsiveness     Yes       • inlet monitoring adjustable     Yes       • external reset     Yes       Control circuit/ Control     Yes       control supply voltage at AC     24 24 V       • at 50 Hz rated value     24 24 V       • at 60 Hz rated value     24 24 V       • at 60 Hz rated value     24 24 V       • rated value     24 24 V       • rated value     24 24 V	Substance Prohibitance (Date)	05/01/2012
• outlet monitoring adjustableYes• adjustable responsivenessYes• inlet monitoring adjustableYes• external resetYesControl circuit/ Controlcontrol supply voltage at AC• at 50 Hz rated value24 24 V• at 60 Hz rated value24 24 V• rated value24 24 V• rated value24 24 V• rated value24 24 V• rated value24 24 V	Product Function	
	product function	
• inlet monitoring adjustable         Yes           • external reset         Yes           Control circuit/ Control         Yes           control supply voltage at AC         • at 50 Hz rated value           • at 60 Hz rated value         24 24 V           • at 60 Hz rated value         24 24 V           • rated value         24 24 V           • rated value         24 24 V	<ul> <li>outlet monitoring adjustable</li> </ul>	Yes
• external reset       Yes         Control circuit/ Control	<ul> <li>adjustable responsiveness</li> </ul>	Yes
Control circuit/ Control         control supply voltage at AC       4         • at 50 Hz rated value       24         • at 60 Hz rated value       24         control supply voltage at DC       24         • rated value       24         operating range factor control supply voltage rated value at DC       24	<b>o</b> ,	
control supply voltage at AC       24 24 V         • at 50 Hz rated value       24 24 V         • at 60 Hz rated value       24 24 V         control supply voltage at DC       24 24 V         • rated value       24 24 V         operating range factor control supply voltage rated value at DC       24 24 V	external reset	Yes
<ul> <li>at 50 Hz rated value</li> <li>at 60 Hz rated value</li> <li>at 60 Hz rated value</li> <li>24 24 V</li> <li>control supply voltage at DC</li> <li>rated value</li> <li>24 24 V</li> <li>operating range factor control supply voltage rated value at DC</li> </ul>	Control circuit/ Control	
<ul> <li>at 60 Hz rated value</li> <li>control supply voltage at DC</li> <li>rated value</li> <li>coperating range factor control supply voltage rated value at DC</li> </ul>	control supply voltage at AC	
control supply voltage at DC       • rated value       24 24 V         operating range factor control supply voltage rated value at DC       24 24 V	<ul> <li>at 50 Hz rated value</li> </ul>	
• rated value 24 24 V operating range factor control supply voltage rated value at DC	<ul> <li>at 60 Hz rated value</li> </ul>	24 24 V
operating range factor control supply voltage rated value at DC		
value at DC		24 24 V
initial value     0.85		
	initial value	0.85

full-scale value	1.1
operating range factor control supply voltage rated	
value at AC at 50 Hz	
<ul> <li>initial value</li> </ul>	0.85
<ul> <li>full-scale value</li> </ul>	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
<ul> <li>initial value</li> </ul>	0.85
<ul> <li>full-scale value</li> </ul>	1.1
Measuring circuit	
adjustable response delay time	
when starting	0.5 10 s
with lower or upper limit violation	0.5 10 s
buffering time in the event of power failure minimum	200 ms
	conductive
physical measuring principle	conductive
Precision	
relative metering precision	20 %
temperature drift per °C	1 %/°C
Auxiliary circuit	
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
number of CO contacts	
delayed switching	1
operating frequency with 3RT2 contactor maximum	5 000 1/h
ampacity of the output relay at AC-15	
• at 250 V at 50/60 Hz	3 A
• at 200 V at 50/60 Hz	3 A
	5 A
ampacity of the output relay at DC-13	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
operational current at 17 V minimum	5 mA
•	
continuous current of the DIAZED fuse link of the	4 A
continuous current of the DIAZED fuse link of the output relay	
continuous current of the DIAZED fuse link of the	
continuous current of the DIAZED fuse link of the output relay	
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility	
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC	4 A
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5	4 A 2 KV 2 KV
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC	4 A 2 kV
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5	4 A 2 KV 2 KV 1 KV
Continuous current of the DIAZED fuse link of the output relay         Electromagnetic compatibility         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         field-based interference according to IEC 61000-4-3	4 A 2 kV 2 kV 1 kV 10 V/m
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2	4 A 2 KV 2 KV 1 KV
Continuous current of the DIAZED fuse link of the output relay         Electromagnetic compatibility         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         field-based interference according to IEC 61000-4-3	4 A 2 kV 2 kV 1 kV 10 V/m
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2	4 A 2 kV 2 kV 1 kV 10 V/m
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation	4 A 2 kV 2 kV 1 kV 10 V/m
continuous current of the DIAZED fuse link of the output relay         Electromagnetic compatibility         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         field-based interference according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Galvanic isolation	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs Connections/ Terminals	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs Connections/ Terminals product component removable terminal for auxiliary	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs Connections/ Terminals product component removable terminal for auxiliary and control circuit	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes screw-type terminals
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes Screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 2x (20 14)
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section	4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 2x (20 14) 2x (20 14)
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid	2 kV 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 2x (20 14) 2x (20 14) 0.5 4 mm <sup>2</sup>
<ul> <li>continuous current of the DIAZED fuse link of the output relay</li> <li>Electromagnetic compatibility</li> <li>conducted interference <ul> <li>due to burst according to IEC 61000-4-4</li> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul> </li> <li>field-based interference according to IEC 61000-4-3 <ul> <li>electrostatic discharge according to IEC 61000-4-3</li> <li>electrostatic discharge according to IEC 61000-4-2</li> </ul> </li> <li>Galvanic isolation <ul> <li>between input and output</li> <li>between the outputs</li> </ul> </li> <li>Connections/ Terminals <ul> <li>product component removable terminal for auxiliary and control circuit</li> <li>type of electrical connection</li> <li>type of connectable conductor cross-sections</li> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> <li>connectable conductor cross-section</li> <li>solid</li> <li>finely stranded with core end processing</li> </ul> </li> </ul>	2 kV 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 2x (20 14) 2x (20 14)
<ul> <li>continuous current of the DIAZED fuse link of the output relay</li> <li>Electromagnetic compatibility</li> <li>conducted interference <ul> <li>due to burst according to IEC 61000-4-4</li> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul> </li> <li>field-based interference according to IEC 61000-4-3 <ul> <li>electrostatic discharge according to IEC 61000-4-2</li> </ul> </li> <li>Galvanic isolation <ul> <li>between input and output</li> <li>between the outputs</li> </ul> </li> <li>Connections/ Terminals <ul> <li>product component removable terminal for auxiliary and control circuit</li> <li>type of electrical connection</li> <li>type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> </li> <li>Connectable conductor cross-section <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables stranded</li> </ul> </li> </ul></li></ul>	2 kV 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 2x (20 14) 2x (20 14) 0.5 4 mm <sup>2</sup>
<ul> <li>continuous current of the DIAZED fuse link of the output relay</li> <li>Electromagnetic compatibility</li> <li>conducted interference <ul> <li>due to burst according to IEC 61000-4-4</li> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul> </li> <li>field-based interference according to IEC 61000-4-3 <ul> <li>electrostatic discharge according to IEC 61000-4-3</li> <li>electrostatic discharge according to IEC 61000-4-2</li> </ul> </li> <li>Galvanic isolation <ul> <li>between input and output</li> <li>between the outputs</li> </ul> </li> <li>Connections/ Terminals <ul> <li>product component removable terminal for auxiliary and control circuit</li> <li>type of electrical connection</li> <li>type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> </li> <li>Connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>AWG number as coded connectable conductor cross section</li> </ul> </li> </ul></li></ul>	2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes Screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 2x (20 14) 0.5 4 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup>
continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • solid	2 kV 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes Screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 2x (20 14) 0.5 4 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 20 14
<ul> <li>continuous current of the DIAZED fuse link of the output relay</li> <li>Electromagnetic compatibility</li> <li>conducted interference <ul> <li>due to burst according to IEC 61000-4-4</li> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul> </li> <li>field-based interference according to IEC 61000-4-3 <ul> <li>electrostatic discharge according to IEC 61000-4-3</li> <li>electrostatic discharge according to IEC 61000-4-2</li> </ul> </li> <li>Galvanic isolation <ul> <li>between input and output</li> <li>between the outputs</li> </ul> </li> <li>Connections/ Terminals <ul> <li>product component removable terminal for auxiliary and control circuit</li> <li>type of electrical connection</li> <li>type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> </li> <li>Connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>AWG number as coded connectable conductor cross section</li> </ul> </li> </ul></li></ul>	2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes No Yes Screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 2x (20 14) 0.5 4 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup>

Installation/ mounting	Installation/ mounting/ dimensions							
mounting position			any					
fastening method				v and snap-on mountin	g			
height			92 m					
width			22.5	mm				
depth			91 m	m				
required spacing								
<ul> <li>with side-by-side</li> </ul>	te mounting							
— forwards	le meaning		0 mm	h				
— backwards	2		0 mm					
— upwards	5		0 mm					
			0 mm					
— downward				- -				
— at the side			0 mn	1				
<ul> <li>for grounded particular</li> </ul>	arts							
— forwards			0 mn					
— backwards	S		0 mn					
— upwards			0 mn	ı				
— at the side	)		0 mn	ı				
- downward	s		0 mn	ı				
<ul> <li>for live parts</li> </ul>								
— forwards			0 mn	ı				
— backwards	S		0 mm	ı				
- upwards			0 mn					
- downward	s		0 mm	ı				
— at the side			0 mn					
Ambient conditions			0 1111					
			0.000	2				
	height above sea level i	maximum	2 000	Jm				
ambient temperatur								
<ul> <li>during operation</li> </ul>			-25 +60 °C					
	<ul> <li>during storage</li> </ul>		-40 +80 °C					
<ul> <li>during transpor</li> </ul>	t		-40 +80 °C					
Certificates/ approval	S							
General Product Ap	pproval				EMC	Declaration of		
Concrar rouder A					Lino	Conformity		
<u>Confirmation</u>		(UL) u		EAC	RCM	UK CA		
Declaration of Conformity	Test Certificates			Marine / Shipping		other		
CE EG-Konf.	<u>Special Test Certific-</u> <u>ate</u>	<u>Type Test Cer</u> ates/Test Rep		Lloyd's Register us	DNV-GL DNV-GL	<u>Confirmation</u>		
Railway								
Vibration and Shock								

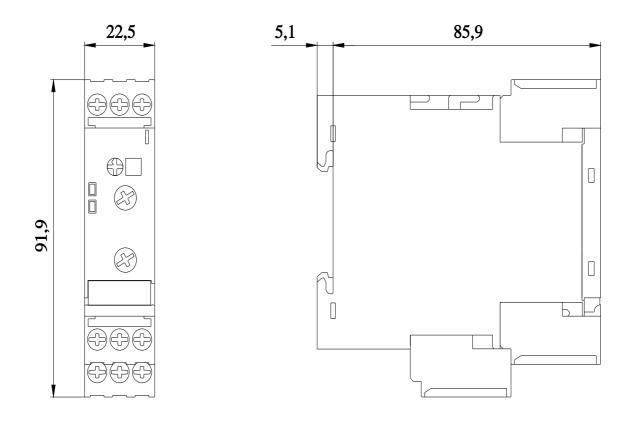
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). **Information on the packaging** 

https://support.industry.siemens.com/cs/ww/en/view/109813875 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=3UG4501-1AA30 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4501-1AA30 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-1AA30 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG4501-1AA30&lang=en Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-1AA30/manual



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