# SIEMENS

### Data sheet

## 3UG4501-1AW30



Analog monitoring relay Fill level monitoring Resistance monitoring from 2 to 200 kohm 0vershoot and undershoot 24 to 240 V AC/DC 50 to 60 Hz DC and AC 2-step or 1-step control Tripping delay 0.5 to 10 s 1 change-over contact screw terminal Successor product for 3UG3501

Figuresimilar	nilar	sim	Figure
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product brand name	SIRIUS			
product designation	Level monitoring relay with analog setting			
product type designation	3UG4			
manufacturer's article number of the optional sensor	2-pole and 3-pole sensors 3UG3207			
General technical data				
product function	Monitoring relay for level monitoring			
display version LED	Yes			
<ul> <li>Apparent power consumption at DC</li> </ul>				
— at 24 V maximum	2 VA			
— at 240 V maximum	4 VA			
<ul> <li>apparent power consumption at AC</li> </ul>				
— at 24 V maximum	2 VA			
— at 240 V maximum	4 VA			
insulation voltage				
<ul> <li>for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value</li> </ul>	300 V			
degree of pollution	3			
type of voltage				
<ul> <li>of the control supply voltage</li> </ul>	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	К			
relative repeat accuracy	1 %			
Substance Prohibitance (Date)	05/01/2012			
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8			
Weight	0.144 kg			
Product Function				
product function				
<ul> <li>outlet monitoring adjustable</li> </ul>	Yes			
<ul> <li>adjustable responsiveness</li> </ul>	Yes			
<ul> <li>inlet monitoring adjustable</li> </ul>	Yes			
external reset	Yes			
Control circuit/ Control				

control supply voltage at AC <ul> <li>at 50 Hz rated value</li> </ul>	24 240 V
at 50 Hz rated value     at 60 Hz rated value	24 240 V
control supply voltage at DC rated value	24 240 V
operating range factor control supply voltage rated value at	24 240 V
DC	
• initial value	0.85
full-scale value	1.1
operating range factor control supply voltage rated value at	
AC at 50 Hz	
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.85
• full-scale value	1.1
Measuring circuit	
adjustable response delay time	
when starting	0.5 10 s
<ul> <li>with lower or upper limit violation</li> </ul>	0.5 10 s
buffering time in the event of power failure minimum	200 ms
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 400 V at 50/60 Hz	3 A
ampacity of the output relay at DC-13 ● at 24 V	1A
• at 24 V • 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 output	4 A
relay	
Electromagnetic compatibility	
conducted interference	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV
• due to conductor-earth surge according to IEC 61000-4-5	2 kV
• 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	
galvanic isolation	
between input and output	Yes
between the outputs	No
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
Connections/ Terminals	Vac
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	screw terminal
type of connectable conductor cross-sections	
• solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)

<ul> <li>for AWG cab</li> </ul>	oles solid		2x (20	14)		
<ul> <li>for AWG cat</li> <li>for AWG cat</li> </ul>			2x (20			
	luctor cross-section		27 (20			
• solid			0.5 4	4 mm <sup>2</sup>		
	ed with core end processing			2.5 mm²		
	coded connectable conduc	tor cross	0.0 /	2.5 11111		
• solid			20 1	4		
<ul> <li>stranded</li> </ul>			20 1			
	ith acrow type terminale			14 1.2 N·m		
	vith screw-type terminals		0.0	1.2 NºIII		
Installation/ mounti			_	_	_	_
mounting position			any			
fastening method				and snap-on mounting		
height			92 mm			
width			22.5 m			
depth			91 mm	1		
required spacing						
<ul> <li>with side-by-</li> </ul>						
— forward			0 mm			
— backwa			0 mm			
- upward			0 mm			
— downw			0 mm			
— at the s			0 mm			
<ul> <li>for grounded</li> </ul>	l parts					
— forward	ds		0 mm			
— backwa	ards		0 mm			
- upward	ls		0 mm			
— at the s	side		0 mm			
— downw	ards		0 mm			
<ul> <li>for live parts</li> </ul>						
— forward	ds		0 mm			
— backwa	ards		0 mm			
- upward	ls		0 mm			
— downw	ards		0 mm			
— at the s	side		0 mm			
Ambient conditions	;					
installation altitude	at height above sea level ma	aximum	2 000	m		
ambient temperat	ure					
<ul> <li>during opera</li> </ul>	ition		-25	+60 °C		
<ul> <li>during storage</li> </ul>	ge		-40	+80 °C		
<ul> <li>during transp</li> </ul>	port		-40	+80 °C		
Approvals Certifica	tes					
General Product	Approval					
~ ~	<b>Confirmation</b>	<u> </u>				
(E				( <b>m</b> )	(ŲL)	EAC
EG-Konf.		UK		ccc		LIIL
					01	
EMV		Test Certificat	es		Marine / Shipping	
<b>A</b>	<u>KC</u>	Special Test Ce	ertific-	Type Test Certific-	<b>2 8</b>	11
		ate		ates/Test Report	44	Register
RCM					DNV	UIS
1.40					Ditt	540
other	Railway	Environment				
othol	Nativay	Livitonment				

#### **Confirmation**

Special Test Certificate



Environmental Confirmations

#### Further information

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=3UG4501-1AW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4501-1AW30

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

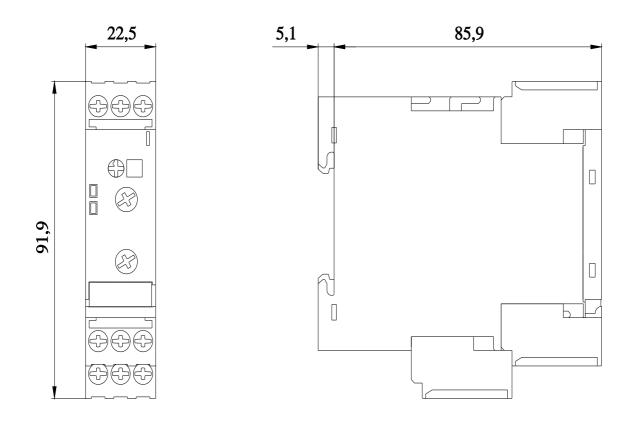
https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-1AW30

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG4501-1AW30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-1AW30/manual



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