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

Figure	simi	lar
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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
 Apparent power consumption at DC 	
— at 24 V maximum	2 VA
— at 240 V maximum	4 VA
 apparent power consumption at AC 	
— at 24 V maximum	2 VA
— at 240 V maximum	4 VA
insulation voltage	
 for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value 	300 V
degree of pollution	3
type of voltage	
 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	К
relative repeat accuracy	1 %
Substance Prohibitance (Date)	05/01/2012
Product Function	
product function	
 outlet monitoring adjustable 	Yes
 adjustable responsiveness 	Yes
 inlet monitoring adjustable 	Yes
external reset	Yes
Control circuit/ Control	
control supply voltage at AC	
at 50 Hz rated value	24 240 V
• 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 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
 with lower or upper limit violation 	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 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 relay	4 A
Electromagnetic compatibility	
conducted interference	
 due to burst according to IEC 61000-4-4 	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
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	screw-type terminals
type of connectable conductor cross-sections	
• solid	1x (0.5 4.0 mm ²), 2x (0.5 2.5 mm ²)
finely stranded with core end processing	1x (0.5 2.5 mm ²), 2x (0.5 1.5 mm ²)
• for AWG cables solid	2x (20 14)
for AWG cables stranded	2x (20 14)
 connectable conductor cross-section solid 	0.5 4 mm²

 finely stranded w 	ith core end processing		0.5	2.5 mm ²			
	d connectable conducto	or cross	010 111				
section							
 solid 			20	14			
 stranded 	stranded		20	14			
tightening torque with se	tightening torque with screw-type terminals			1.2 N·m			
Installation/ mounting/ o	dimensions						
mounting position			any				
fastening method			screw	and snap-on mounting			
height			92 mm				
width			22.5 mm				
depth			91 mm				
required spacing							
 with side-by-side 	mounting						
— forwards			0 mm				
— backwards			0 mm				
— upwards			0 mm				
— downwards			0 mm				
— at the side			0 mm				
 for grounded part 	ts						
— forwards			0 mm				
— backwards	— backwards		0 mm				
— upwards			0 mm				
— at the side			0 mm				
— downwards	— downwards		0 mm				
 for live parts 							
- forwards	— forwards		0 mm				
— backwards	— backwards		0 mm				
— upwards			0 mm				
— downwards	— downwards		0 mm				
— at the side			0 mm				
Ambient conditions							
installation altitude at he	eight above sea level max	imum	2 000	m			
ambient temperature	ambient temperature						
 during operation 			-25	. +60 °C			
 during storage 			-40	+80 °C			
 during transport 	during transport		-40	. +80 °C			
Certificates/ approvals							
General Product App	roval				EMC	Declaration of Con-	
						formity	
Confirmation	\frown	\sim			^		
	(000)	(UL)		FAL	<i>I</i> €∧	(F	
	<u> </u>	<u> </u>		LIIL	<u> </u>	EG-Konf.	
	ccc	01			n.c.m	Ed-Kolli.	
Declaration of Con-							
formity	Test Certificates			Marine / Shipping		other	
UK	Special Test Certific- ate	Type Test Certif ates/Test Repo	f <u>iC-</u> ort	Llovd's	AL DESCRIPTION OF THE OWNER	Confirmation	
UK CA			<u>//(</u>	Régister	DNV-GL		
LH				LRS	DAVELIZEBBAR		
Railway							
Vibration and Shock							

Further information

Siemens has decided to exit the Russian market (see here).

 $\underline{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}$

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=3UG4501-1AW30

Cax online generator

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

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

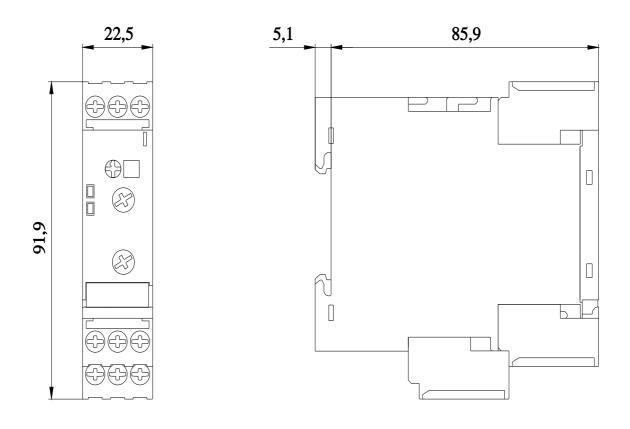
https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-1AW30

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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