# **SIEMENS**

## Data sheet

# 3UG4501-1AA30



### Product function

### Measuring circuit:

# Monitoring relay for level monitoring

3UG3501-1AC20

ANALOG MONITORING RELAY FILL LEVEL

DELAY 0.5 TO 10S 1 CO CONTACT SCREW TERMINAL REPLACEMENT PRODUCT FOR

MONITORING RESISTANCE MONITORING FROM 2 TO 200 KOHM OVERSHOOT AND UNDERSHOOT SUPPLY VOLTAGE: 24 V AC/DC DC AND AC 50 TO 60 HZ NO GALVANIC ISOLATION FROM MEASURING CIRCUIT 2-POINT OR 1-POINT CONTROL TRIPPING

Adjustable response delay time		
• when starting	S	0.5 10
<ul> <li>with lower or upper limit violation</li> </ul>	S	0.5 10
Adjustable response value impedance	kΩ	2 200
Measuring electrode current maximum	mA	1
Measuring electrode voltage maximum	V	15
Number of measuring circuits		1
Buffering time in the event of power failure minimum	ms	200

General technical data:				
Response time maximum	ms	300		
Relative metering precision	%	20		
Temperature drift per °C	%/°C	1		
Relative repeat accuracy	%	1		
Manufacturer article number of the optional sensor		2-pole and 3-pole sensors 3UG3207		
Cable length of sensor maximum	m	100		
Display version LED		Yes		
Product function				
<ul> <li>Adjustable response sensitivity</li> </ul>		Yes		
<ul> <li>outlet monitoring adjustable</li> </ul>		Yes		
<ul> <li>inlet monitoring adjustable</li> </ul>		Yes		
• External reset		Yes		
Startup time after the control supply voltage has been applied	ms	500		

Type of voltage of the control supply voltage	-	AC/DC
Control supply voltage	-	
• with AC		
— at 50 Hz Rated value	V	24 24
— at 60 Hz Rated value	V	24 24
<ul> <li>for DC Rated value</li> </ul>	V	24 24
Operating range factor control supply voltage rated	-	
value		
• with AC		
— at 50 Hz		0.85 1.1
— at 60 Hz		0.85 1.1
• for DC		0.85 1.1
Surge voltage resistance Rated value	kV	4
Active power consumption	W	2
Protection class IP		IP20
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Vibration resistance acc. to IEC 60068-2-6	-	1 6 Hz: 15 mm, 6 500 Hz: 2g
Shock resistance acc. to IEC 60068-2-27	-	sinusoidal half-wave 15g / 11 ms
Installation altitude at height above sea level maximum	m	2 000
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV
Electrostatic discharge acc. to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m
Insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 Rated value	V	300
Degree of pollution	-	3
Apparent power consumption with AC		
• at 24 V maximum	V·A	2
Ambient temperature		
• during operation	°C	-25 +60
• during storage	°C	-40 +80
during transport	°C	-40 +80
Galvanic isolation		
<ul> <li>between entrance and outlet</li> </ul>		Yes
• between the outputs		No
lechanical data:		
Width	mm	22.5

Height	mm	92
Depth	mm	91
mounting position		any
Required spacing for grounded parts	_	
• forwards	mm	0
Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Required spacing with side-by-side mounting	_	
• forwards	mm	0
Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Required spacing for live parts	_	
• forwards	mm	0
Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Mounting type	-	screw and snap-on mounting
Product function removable terminal for auxiliary and	_	Yes
control circuit		
Type of electrical connection		screw-type terminals
Type of connectable conductor cross-section		
• solid		1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
<ul> <li>finely stranded</li> </ul>		
— with core end processing		1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
<ul> <li>for AWG conductors</li> </ul>		
— solid		2x (20 14)
— stranded		2x (20 14)
Tightening torque with screw-type terminals	N∙m	0.8 1.2
Outputs:		
Number of NO contacts delayed switching		0
Number of NC contacts delayed switching		0
Number of CO contacts delayed switching		1
Ampacity of the output relay		
● at AC-15		
— at 250 V at 50/60 Hz	А	3
— at 400 V at 50/60 Hz	А	3
• at DC-13		

— at 24 V	А	1
— at 125 V	А	0.2
— at 250 V	А	0.1
Operating current at 17 V minimum	mA	5
Continuous current of the DIAZED fuse link of the output relay	A	4
Mechanical service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at 230 V typical		100 000
Operating frequency with 3RT2 contactor maximum	1/h	5 000

Certificates/	approvals:	

General Product Approval		EMC	Test Certificates	Test Certificates	
	EAC		С-тіск	Special Test Certificate	Type Test Certificates/Test Report

Shipping Ap	oproval		other		
ĴÅ DNV	GL	Lloyd's Register	Declaration of Conformity	other	
DNV	GL	LRS			

### urther information

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

Industry Mall (Online ordering system) http://www.siemens.com/industrymall

### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG45011AA30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3UG45011AA30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG45011AA30&lang=en

