SIEMENS

Data sheet 3UG4501-1AW30



ANALOG MONITORING RELAY FILL LEVEL
MONITORING RESISTANCE MONITORING FROM 2
TO 200 KOHM OVERSHOOT AND UNDERSHOOT
AC/DC 24 TO 240V DC AND AC 50 TO 60 HZ 2-POINT
OR 1-POINT CONTROL TRIPPING DELAYED 0.5 TO
10S 1 CHANGEOVER CONTACT SCREW TERMINAL
REPLACEMENT PRODUCT F. 3UG3501

Figure similar

Product function		Monitoring relay for level monitoring		
Measuring circuit:				
Adjustable response delay time				
when starting	S	0.5 10		
 with lower or upper limit violation 	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				
 Adjustable response sensitivity 		Yes		
 outlet monitoring adjustable 		Yes		
• inlet monitoring adjustable		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	24 240
— at 60 Hz Rated value	V	24 240
• for DC Rated value	٧	24 240
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
• at 240 V maximum	V·A	4
Ambient temperature		
during operation	°C	-25 +60
during storage	°C	-40 +80
during transport	°C	-40 +80
Galvanic isolation		
between entrance and outlet		Yes
between entrance and odder		

Mechanical 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 control circuit		Yes
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)
• finely stranded		
 — with core end processing 		1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
• for AWG conductors		
— 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	Α	3
— at 400 V at 50/60 Hz	Α	3

• at DC-13		
— at 24 V	Α	1
— at 125 V	Α	0.2
— at 250 V	Α	0.1
Operating current at 17 V minimum	mA	5
Continuous current of the DIAZED fuse link of the output relay	Α	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

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other

Type Test
Certificates/Test
Report

Special Test Certificate

Shipping Approval







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/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG45011AW30

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

https://support.industry.siemens.com/cs/ww/en/ps/3UG45011AW30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG45011AW30&lang=en



