SIEMENS

Product 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

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 details:		
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
• with AC / at 60 Hz		
• Rated value	V	24 … 240
• for DC		
• Rated value	V	24 … 240
Operating range factor control supply voltage rated value		
• with AC		
• at 50 Hz		0.85 … 1.1
• with AC		
• 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 BURST / acc. to IEC 61000-4-4		2 kV
Conducted interference conductor-earth SURGE / acc. to IEC 61000 -4-5		2 kV
Conducted interference 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
• with AC / 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 the outputs		No

Mechanical design:

Width	mm	22.5
Height	mm	92
Depth	mm	91
mounting position		any
Spacing required		
• for grounded parts	mm	0
• for grounded parts	mm	0
• for grounded parts	mm	0
• for grounded parts	mm	0
• for grounded parts	mm	0
Spacing required		
• with side-by-side mounting	mm	0
• with side-by-side mounting	mm	0
• with side-by-side mounting	mm	0
• with side-by-side mounting	mm	0
• with side-by-side mounting	mm	0
Spacing required		
• for live parts	mm	0
• for live parts	mm	0
• for live parts	mm	0
• for live parts	mm	0
• for live parts	mm	0
Mounting type		screw and snap-on mounting
Product function / removable terminal for auxiliary and control circuit		Yes
Design of the 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	A	3
• at 400 V / at 50/60 Hz	A	3
• at DC-13		
• at 24 V	A	1
• at 125 V	A	0.2
• at 250 V	A	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	
CCC	EAC	UL	C-TICK	Special Test Certificate	Type Test Certificates/Test Report
Shipping Approval			**other**		
DNV	GL	LRS	Declaration of Conformity	other	

Further information:

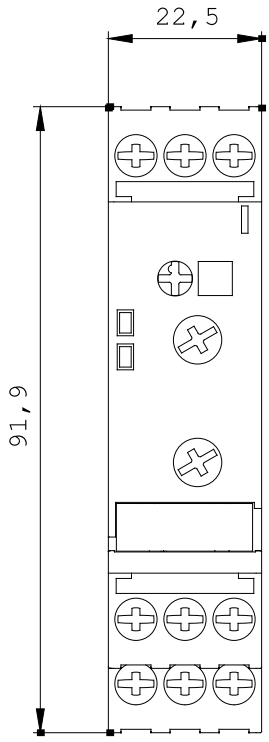
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

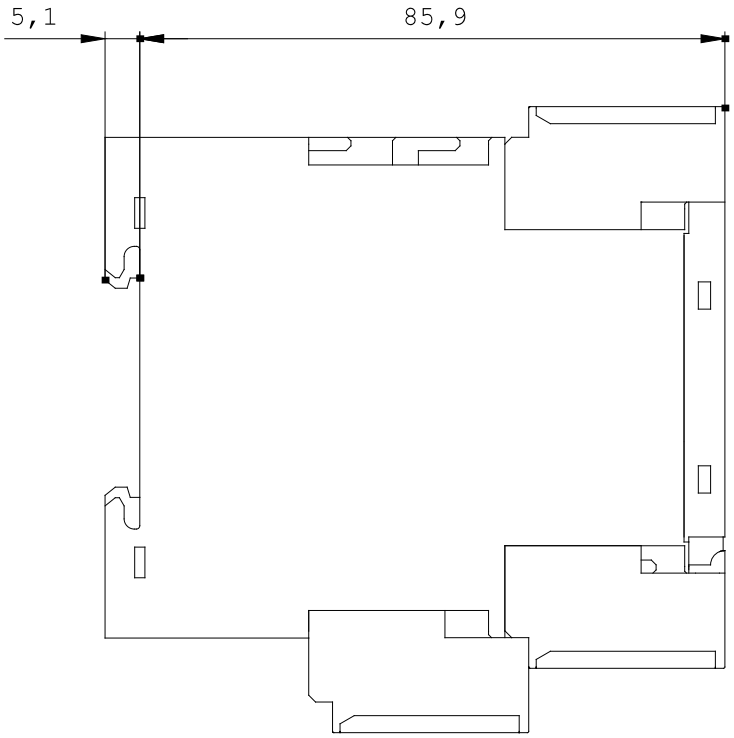
Industry Mall (Online ordering system)
http://www.siemens.com/industrial-controls/mall

Cax online generator:
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3UG4501-1AW30/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3UG4501-1AW30





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