SIEMENS

Data sheet 3UG4501-1AW30

Figure similar

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 data:		
Response time maximum	ms	300
Relative metering precision	%	20
Temperature drift per °C	%/°C	1
Relative repeat accuracy	%	1
Manufacturer's article number of the optional sensor		2-pole and 3-pole sensors 3UG3207
Wire 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
Starting time after the control supply voltage has been applied	ms	500
Type of voltage of the control supply voltage		AC/DC
Control supply voltage		
• at AC		
— at 50 Hz rated value	V	24 ... 240
— at 60 Hz rated value	V	24 ... 240
• at DC rated value	V	24 ... 240
Operating range factor control supply voltage rated value		
• at AC		
— at 50 Hz		0.85 ... 1.1
— at 60 Hz		0.85 ... 1.1
• at DC		0.85 ... 1.1
Surge voltage resistance rated value	kV	4
Consumed active power	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 at 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 the outputs		No

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-sections		
• 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)
• at 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	Declaration of Conformity	Test Certificates
CCC	UL	EAC	C-Tick	EG-Konf.	Type Test Certificates/Test Report

Test Certificates	Shipping Approval	other	Railway
Special Test Certificate	LRS	Confirmation	Vibration and Shock

Further information

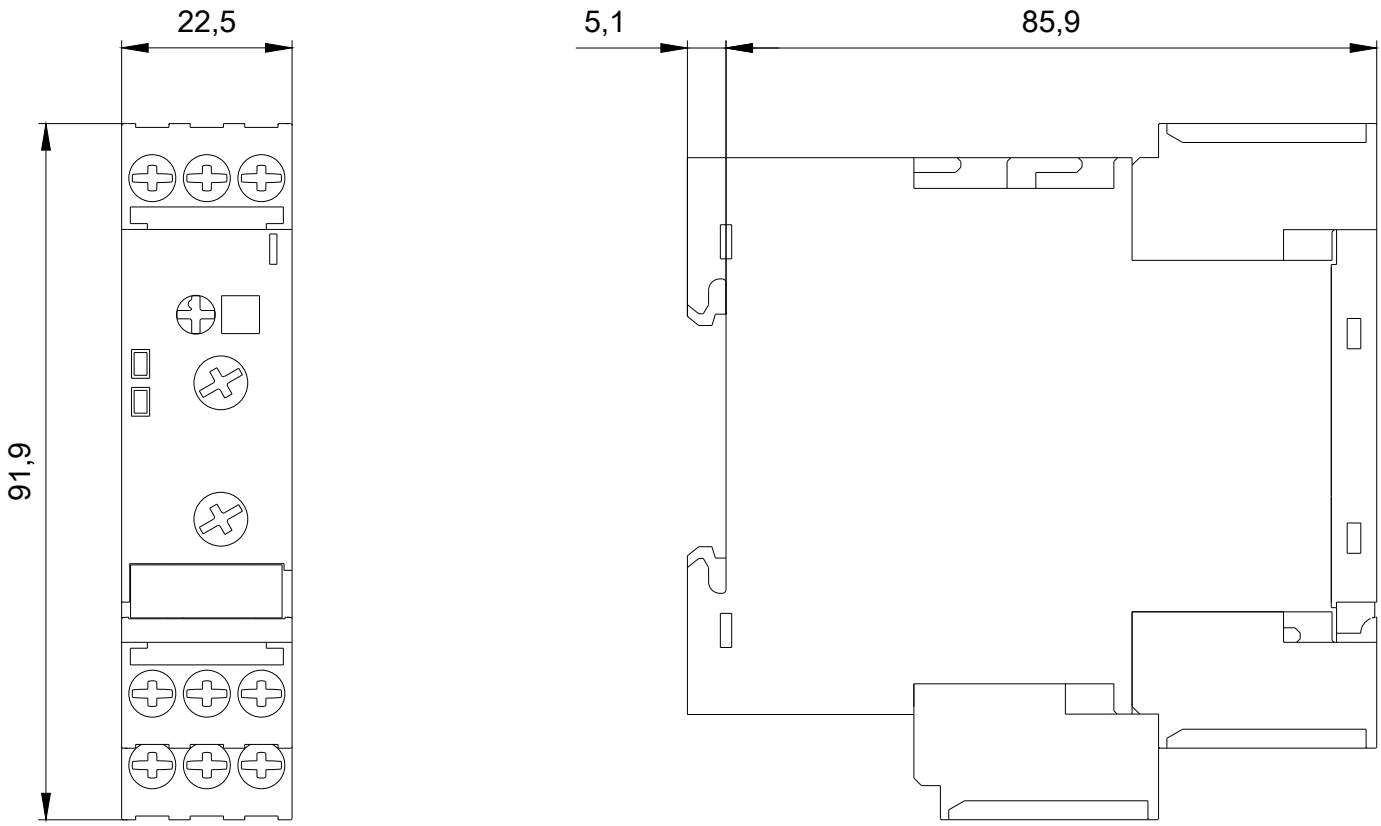
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

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=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



last modified: 08/12/2017