SIEMENS

Product data sheet 3UG4501-2AW30

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 SPRING-LOADED TYPE

Product function		Monitoring relay for level monitoring
Measuring circuit:		
Adjustable response delay time		
• when starting	s	0.3 … 10
• with lower or upper limit violation	s	0.3 … 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
Stored energy time / at mains power cut / 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 the sensor / maximum	m	100
Type of display / LED		Yes
Product function		
• response sensitivity adjustable		Yes

• outlet monitoring adjustable		Yes
• inlet monitoring adjustable		Yes
• reset external		Yes
Starting time / after the control supply voltage has been applied	ms	500
Type of voltage / of the controlled supply voltage		AC/DC
Control supply voltage		
• at 50 Hz / at AC		
• rated value	V	24 … 240
• at 60 Hz / at AC		
• rated value	V	24 … 240
• for DC		
• rated value	V	24 … 240
Operating range factor control supply voltage rated value		
• at 50 Hz		
• for AC		0.85 … 1.1
• at 60 Hz		
• for AC		0.85 … 1.1
• for DC		0.85 … 1.1
Impulse voltage resistance / rated value	kV	4
Recorded real power	W	2
Protection class IP		IP20
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Resistance against vibration / according to IEC 60068-2-6		1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
Resistance against shock / according to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Installation altitude / at a height over sea level / maximum	m	2,000
Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4		2 kV
Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5		2 kV
Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5		1 kV
Electrostatic discharge / according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling / according 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 consumed		
• at 24 V / for AC / maximum	V·A	2
• at 240 V / for AC / maximum	V·A	4
Ambient temperature		
• during operating	°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	94
Depth	mm	91
mounting position		any
Distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	0
• upwards	mm	0
• downwards	mm	0
Type of mounting		screw and snap-on mounting
Product function / removable terminal for auxiliary and control circuit		Yes
Design of the electrical connection		spring-loaded terminals
Type of the connectable conductor cross-section		
• solid		2x (0.25 ... 1.5 mm²)
• finely stranded		
• with wire end processing		2 x (0.25 ... 1.5 mm²)
• without wire end processing		2x (0.25 ... 1.5 mm²)
• for AWG conductors		
• solid		2x (24 ... 16)
• stranded		2x (24 ... 16)

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 change-over switches / delayed switching		1
Current carrying capacity / of 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 operating cycles as operating time / typical		10,000,000
Electrical operating cycles as operating time / at AC-15 / at 230 V / typical		100,000
Operating cycles / with 3RT2 contactor / maximum	1/h	5,000

Certificates/approvals:

General Product Approval			EMC	Test Certificates
CCC	GOST	UL	C-TICK	Special Test Certificate
Shipping Approval			**other**	
DNV	GL	LRS	Declaration of Conformity	other

Further information:

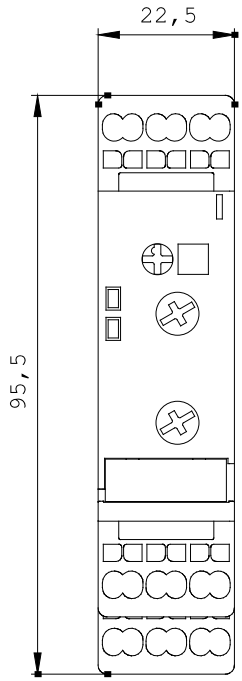
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

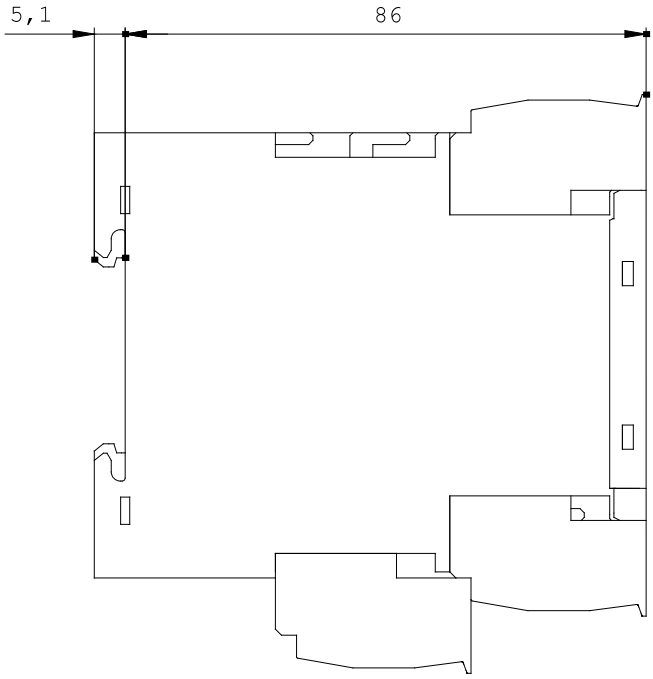
Industry Mall (Online ordering system)
http://www.siemens.com/industrial-controls/mall

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

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3UG4501-2AW30/all

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





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